



# **CONSULT/REQUEST TRACKING**

## **TECHNICAL MANUAL**

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# Introduction

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## **Purpose of the Consult/Request Tracking Package**

The Consult/Request Tracking package (Consults) was developed to improve the quality of patient care by providing an efficient mechanism for clinicians to order consults and requests using Computerized Patient Record System (CPRS) Order Entry, and to permit hospital services to track the progress of a consult order from the point of receipt through its final resolution.

## **Scope of the Manual**

This manual provides technical descriptions of Consults tracking routines, protocols, files, globals, options, security data, menu diagrams and any other information required to effectively set up and use the Consults package.

From time to time improvements are made to the Consults package. The latest information about Consults, as well as the latest version of this manual, is posted on the Consults Web Page at:

`vista.med.va.gov/consults`

## **Audience**

Information in this manual is technical in nature and is intended to be used by Veterans Affairs Medical Center (VAMC) Information Resource Management Service (IRMS) staff members and Clinical Application Coordinators (CAC's).

## Overview

This release of the Consults package is a revision of the Consult/Request Tracking package Version 2.5. It bears the version number 3.0 and is released with CPRS Version 1.0.

The Consults package provides an interface with CPRS Order Entry which permits clerks or clinicians to enter, edit, and review consults and requests within the CPRS package.

Service/Specialty personnel targeted to receive consults may use this package to:

Have consults or requests electronically relayed to them.

Track the service/specialty's activity concerning the consult or request, from the time of its receipt to its final resolution.

Associate Text Integration Utility (TIU) consult reports with the consult request.

When a consult or request is updated on-line to a "completed" or "discontinued" status by the specialty service personnel, the original clinician who requested the order is notified electronically of the order's resolution. The clinician may then use "View Alerts" or the Detailed Display option in either the Consults or CPRS packages to review any comments or results which may be associated with the order's resolution.

Functionality has been provided for IRMS/ADPAC personnel to set up and manage the consult service hierarchy.

A checklist is provided (in Appendix A of this manual) to help you install, plan, and implement the Consults package. Use the checklist in conjunction with the detailed information provided in the **Implementation and Maintenance** section of this manual.

## **Patches**

This manual includes information on the following GMRC patches: 1, 2, 4, 5, 6, 7, 8, 11, 12, 13, and 14.





# Package Orientation

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This technical manual provides IRMS/ADPAC personnel with technical descriptions of Consults routines, files, options, and other necessary information required to effectively implement and use the Consults package.

This manual should assist you in:

Setting up a hierarchy of site specific services/specialties.

Setting up Notification users/teams related to a service, who will be notified when an order is released by CPRS order entry.

Setting up tracking update capabilities for specific services/specialties to track the progress of ordered consults or procedures from receipt to their completion or discontinuance.

Setting up procedure request protocol entries in the Protocol file (#101) to be used during the CPRS order process.



**Note:** The primary care clinician and clinic clerk add, edit, discontinue and sign capabilities for ordering consults or requests are provided through CPRS V. 1.0. See the *CPRS Clinical Coordinator & User Manual* for descriptions of how to use the CPRS options.

For package-specific user conventions, please refer to the Package Orientation section of the *Consult/Request Tracking User Manual*.







# Implementation and Maintenance

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## Install, Planning, and Implementation Checklist

A checklist is provided to help you install, plan, and implement the Consults package (see Appendix A). Use the checklist in conjunction with the detailed information provided in this "Implementation and Maintenance" section.

## Menu/Option Diagram

The tools required to implement and maintain the Consults package are found in the Consult Management [GMRC MGR] menu. The following menu diagram illustrates all of the options distributed with the Consults package.

Consult Management [GMRC MGR]

RPT	Consult Tracking Reports ...
ST	Completion Time Statistics
PC	Service Consults Pending Resolution
CC	Service Consults Completed
CP	Service Consults Completed or Pending Resolution
NU	Service Consults with Consults Numbers
SC	Service Consults By Status
	Detailed Report of GMRC Protocols
	List GMRC Protocols
	Print Completion Time Statistics Report
	Print Service Consults by Status
SS	Set up Consult Services
SP	Set up Consult Protocols
SU	Service User Management
CS	Consult Service Tracking
RX	Pharmacy TPN Consults
TP	Print Test Page
GU	Group update of consult/procedure requests
UA	Determine users' update authority
UN	Determine if user is notification recipient
NR	Determine notification recipients for a service
TD	Test Default Reason for Request
LH	List Consult Service Hierarchy
DS	Duplicate Sub-Service

To get you started placing "CONSULT..." orders via CPRS, the option above which requires immediate attention is the Set up Consult Services (SS) option. Before setting up services, you should define your service hierarchy and determine service functionality.

## Define Service Hierarchy

At this point the site must determine which services/specialties should be set up to receive consults and requests. Consults Tracking Service Worksheets, along with descriptions of the type of information that should be recorded in each field on the worksheets, are provided in Appendix B of this manual to assist you in this process.

The Request Services file (#123.5) is distributed with a small selection of services. The hierarchical relationships are not in place upon distribution. See Appendix C for an example of how these services could be related hierarchically to get you started. Appendix C will:

Illustrate the file's hierarchy capabilities (similar to the Option file (#19) hierarchy) with "ALL SERVICES" representing the top of the hierarchy.



**NOTE:** Due to the tight relationship between CPRS orderable items and this file, a service should NEVER be deleted at any point. The best recommendation would be to disable the service and remove it from the ALL SERVICE hierarchy.

The Service/Specialty hierarchy you define can be as complex as needed to meet service requirements at your site. To get started you will probably want to specify a small subset of services/specialties and add to them over a period of time. "ALL SERVICES" needs to be the top entry in the hierarchy.



**NOTE:** "ALL SERVICES" should be the top hierarchy service. All Services should never be the sub-service of another service.

In order to build the service hierarchy, you will need to know how the service entry in the Request Services file (#123.5) is used. Some services will be used as a GROUPER ONLY and other services may be used for TRACKING ONLY. The SERVICE USAGE field is provided for you to differentiate the services in the hierarchy.

To see your site's hierarchy use the List Consult Service Hierarchy [GMRC LIST HIERARCHY] option.



**Hint:** If your site is getting an allocation of partition space type of error when ALL SERVICES or another service is specified at the "Select Service/Specialty:" prompt, this is an indication that the hierarchy is set up wrong. This is typically caused by a service being made a sub-service of itself. A service being a sub-service of one of its own sub-services will also manifest this error.

## Service Usage Definition

Whenever a value is defined for the SERVICE USAGE field in the Set up Consults Services [GMRC SETUP REQUEST SERVICES] option, the Service entry will NOT be selectable to send consults to in the CPRS ordering process. Instead, entries in this field reserve the service for special uses within the Consults flow of information.

### Service Usages cause functioning as follows:

BLANK - Permits consults and procedure requests to be sent to this service. A service may be reset to blank by entering an @ sign.

GROUPEL ONLY - Permits a service to be used for grouping other services together for review purposes, and aids in defining the service hierarchy (e.g., ALL SERVICES, INPATIENT SERVICES, OUTSIDE SERVICES). During the order process, a user selecting a grouper only service will be shown the service hierarchy under that service grouper. A grouper only service should never be a service a consult is sent to.

TRACKING ONLY - Permits a service to be defined in a hierarchy, but does not permit users ordering consults in CPRS to be able to see or select a service marked for TRACKING ONLY (e.g., Psychology may be defined with its Service Usage blank, and its sub-specialty multiple defined with services of which some **or** all may be TRACKING ONLY services. This hierarchy facilitates the situation when a service such as Psychology prefers a common location for all related consults to be sent to. A tracking user at the common location then "Forward(s)" the request to one of the TRACKING ONLY services for completion).

DISABLED - Disabled services are not selectable for ordering or tracking.

An example of a potential hierarchy a user would see when ? or ?? are entered at a “Select Service/Specialty: ALL SERVICES” prompt follows. It includes notations for Service Usage definition examples.

	Select Service/Specialty: ??
<b>GROUPE</b> →	ALL SERVICES
<b>GROUPE</b> →	INPATIENT SERVICES
	PSYCHIATRY
<b>GROUPE</b> →	RMS
	OCCUPATIONAL THERAPY
	PHYSICAL THERAPY
	CORRECTIVE THERAPY
<b>GROUPE</b> →	MEDICINE
	CARDIOLOGY
<b>TRACKING</b> →	INVASIVE PROCEDURES
<b>TRACKING</b> →	ECHO
<b>TRACKING</b> →	PACEMAKER
	GASTROENTEROLOGY
	HEMATOLOGY
	PULMONARY
	RHEUMATOLOGY
	ENDOCRINOLOGY
	NEPHROLOGY
	INFECTIOUS DISEASE
	DERMATOLOGY
	NEUROLOGY
	GENERAL MEDICINE
	ONCOLOGY
	GETU
	RENAL
<b>GROUPE</b> →	PSYCHOLOGY
	SMOKING CESSATION
	FAMILY/MARRIAGE COUNSELING
	<i>and so forth...</i>

## Determine Service Functionality

The primary option needed to set up your hierarchy of services is the Set up Consults Services (SS) option. This option updates the Request Services file (#123.5).

You can enable the following functionality, depending on how much information you define for each hospital service in the Request Services file (#123.5).

Functionality you define may vary by Service/Specialty. Also, functionality may or may not be inherited, depending on the setting of the PROCESS PARENTS FOR UPDATES (.07) and PROCESS PARENTS FOR NOTIFS (.08) fields. If a child service has a Yes in these fields, then parents are checked for the appropriate actions. If all services are set to Yes, then all services are checked to the top of the service hierarchy. Alternately, some services can be marked Yes and others marked No. In this case the hierarchy is checked until a No is encountered.

Two options provided in the Consult Management [GMRC MGR] menu option permit definition and maintenance of this functionality. All of the fields below may be updated using the Set Up Consult Services [GMRC SETUP REQUEST SERVICES] option. For ongoing maintenance of service users specified in 3 and 4 below, use the Service User Management [GMRC SERVICE USER MGMT] option.

FUNCTIONALITY ENABLED	MINIMUM FIELDS TO BE COMPLETED	
	Field #	Field Name
1. Ordering consults from the "ALL SERVICES" hierarchy in CPRS and Review of Consults via the Consults options distributed to users.	.01 2 10	<ul style="list-style-type: none"><li>NAME</li><li>SERVICE USAGE</li><li>SUB-SERVICE/SPECIALTY (multiple)</li></ul>
2. Automatic print of a Consultation Form (SF 513) at the service receiving the consult when CPRS order entry releases the order.	123.09	<ul style="list-style-type: none"><li>SERVICE PRINTER</li></ul>

<b>FUNCTIONALITY ENABLED</b>	<b>MINIMUM FIELDS TO BE COMPLETED</b>	
3. Service/Specialty update of Consults activity with automatic notification to the requesting service and to the original requester of the order upon resolution.	.06 123.03 123.04  123.08  123.1  123.3  123.31  123.35	<ul style="list-style-type: none"> <li>• UNRESTRICTED ACCESS</li> <li>• NOTIFY SERVICE ON DC</li> <li>• SERVICE INDIVIDUAL TO NOTIFY</li> <li>• SERVICE TEAM TO NOTIFY (multiple)</li> <li>• UPDATE USERS W/O NOTIFICATIONS (multiple)</li> <li>• UPDATE TEAMS W/O NOTIFICATIONS (multiple)</li> <li>• UPDATE USER CLASSES W/O NOTIFS (multiple)</li> </ul>
4. Automatic notification to service individuals or teams when CPRS releases the order. Assuming these users have the "NEW SERVICE CONSULT" notification turned on.	123.08  123.1  123.2	<ul style="list-style-type: none"> <li>• SERVICE INDIVIDUAL TO NOTIFY</li> <li>• SERVICE TEAM(S) TO NOTIFY (multiple)</li> <li>• NOTIFICATION BY PATIENT LOCATION (multiple)</li> </ul>
5. Ability to administratively complete consults, either singly or by date range.	123.33  123.34  123.5	<ul style="list-style-type: none"> <li>• ADMINISTRATIVE UPDATE USER (multiple)</li> <li>• ADMINISTRATIVE UPDATE TEAM (multiple)</li> <li>• SPECIAL UPDATES INDIVIDUAL</li> </ul>

## Set Up Consult Services (SS)

The Set Up Consult Services command creates and maintains new records in the REQUEST SERVICES (#123.5) file. The following fields are involved:

**SERVICE NAME:** This is the Name of a service or specialty which may receive consult/requests. This may also be a name which represents a group of services or specialties.

**ABBREVIATED PRINT NAME:** This is a commonly known Abbreviation for this Service/Specialty. This name is used to build Consult Notifications when a consult/request is ordered in OE/RR and must be 7 characters or less in length.

**SYNONYM:** Identifies the commonly known names and abbreviations for the Service named in the .01 Name field. Synonyms identified here are used in the look-up of services at "Select Service/Specialty:" prompts.

**SERVICE USAGE:** Whenever a value is defined in the SERVICE USAGE field, the Service entry will NOT be selectable to send consults TO in the OE/RR ordering process. Service Usages cause functioning as follows:

**GROUPEL ONLY** - Allows a service to be used for grouping other services together for review purposes, and aids in defining the service hierarchy (e.g., ALL SERVICES, INPATIENT SERVICES, OUTSIDE SERVICES). During the order process, a user selecting a grouper only service will be shown the service hierarchy under that service grouper. A Grouper ONLY service should never be a "TO" Service on a consult.

**TRACKING ONLY** - Allows a service to be defined in a hierarchy, but will not allow users ordering consults in OE/RR to be able to see or select a service marked for TRACKING ONLY. (e.g., Psychology may be defined with its Service Usage blank, and its Sub-specialty multiple defined with services of which some or all may be "TRACKING ONLY" services. This hierarchy facilitates the situation when a service, such as Psychology, prefers a common location for all related consults to be sent to. A Tracking user at the common location then "Forwards" the request to one of the sub-service TRACKING ONLY services for completion.)

**DISABLED** - Disabled services are not selectable for ordering or tracking.

**SERVICE PRINTER:** Allows the service/specialty to identify a device that will be used for printing Consult Forms (SF 513) 'automatically' at the service when the consult/request order is released by CPRS. If the device is not defined, the Consult Form will not print unless a default service copy device is defined for the Consults package for the ordering location. The default service copy device parameter can be found by using the Print Parameters for Wards/Clinics [OR PARAM PRINTS (LOC)] option.

**NOTIFY SERVICE ON DC:** Controls when members configured to receive notifications for this service in the Consult hierarchy will be alerted to a consult being discontinued. This variable can be set to ALWAYS, NEVER, or REQUESTOR ACTION. REQUESTOR ACTION stipulates notification only if the user discontinuing the consult is not an update user for the consulting service.

**REPRINT 513 ON DC:** This field will determine if the SF 513 should reprint to the consulting service when a consult is discontinued. Again the three choices are ALWAYS, NEVER, or REQUESTOR ACTION. REQUESTOR ACTION stipulates reprinting only if the user discontinuing the consult is not an update user for the consulting service.

**PROVISIONAL DX PROMPT:** Used by CPRS to determine how to prompt for the provisional diagnosis when ordering consults for this service. If this field is set to OPTIONAL, the user will be prompted for the provisional diagnosis but may bypass answering the prompt. If the field is set to SUPPRESS, the user will not be presented with the provisional diagnosis prompt. If set to REQUIRED, the user must answer the prompt to continue placing the order.

**PROVISIONAL DX INPUT:** Determines the method that CPRS uses to prompt the user for input of the provisional diagnosis when ordering a consult. If set to FREE TEXT, the user may type any text from 2-80 characters in length. If set to LEXICON, the user will be required to select a coded diagnosis from the Clinical Lexicon.

**PREREQUISITE:** This word-processing field is utilized to communicate pre-requisite information to the ordering person prior to ordering a consult to this service. This field is presented to the ordering person upon selecting a Consult service and allows them to abort the ordering at that time if they choose. TIU objects may be embedded within this field which are resolved for the current patient during ordering. Any TIU objects must be contained within vertical bars (e.g. |BLOOD PRESSURE| ).

**DEFAULT REASON FOR REQUEST:** The default text used as the reason for request when ordering a consult for this service. This field allows a boilerplate of text to be imported into the reason for request when placing consult orders for this service. If the user places an order using a quick order having boilerplate text, that text supersedes any default text stored in this field. This field may contain any text including TIU objects. TIU Objects must be enclosed in vertical bars (e.g. |PATIENT NAME| ).

**RESTRICT DEFAULT REASON EDIT:** If a DEFAULT REASON FOR REQUEST exists for this service this field effects the ordering person's ability to edit the default reason while placing an order. This variable can be set to UNRESTRICTED, NO EDITING, or ASK ON EDIT ONLY. If the third value, ASK ON EDIT ONLY, is used, the user is only allowed to edit the default reason if the order is edited before releasing to the service.

**SERVICE INDIVIDUAL TO NOTIFY:** A user may be identified in this field as having primary responsibility for receiving consults and tracking them through to completion or



discontinuance. This individual will receive a "NEW SERVICE CONSULT" notification type when a new order is released to the service through CPRS. The user must have the "NEW SERVICE CONSULT/REQUEST" notification type enabled.

**SERVICE TEAM TO NOTIFY:** The name of the Service Team that is to receive notifications of any actions taken on a consult. A team of users may be identified (from the OE/RR LIST file #100.21) who will receive a "NEW SERVICE CONSULT" notification when a new order is released to the service through OE/RR. The individuals on the teams must have the "NEW SERVICE CONSULT/REQUEST" notification type turned "ON". Team members will be able to perform update tracking capabilities.

**NOTIFICATION BY PT LOCATION:** A ward location or hospital location which the service wishes to assign a service individual or team to. When a consult or request is ordered, notifications to the receiving service checks to see if the patients location is defined here. If defined, notifications are sent to an individual and/or members of a team specifically associated with this location.

**PROCESS PARENTS FOR NOTIFS:** This field, if set to YES, causes the parent service of this service to be processed when determining notification recipients. The check is carried up the chain until ALL SERVICES is reached or until a service is marked NO.

**UPDATE USERS W/O NOTIFICATIONS:** A list of individuals who can do update tracking, but who will not get a notification.

**UPDATE TEAMS W/O NOTIFICATIONS:** A list of teams to be assigned update authority for this service. All clinicians in the teams have update authority no matter what patients are in the teams.

**UPDATE USER CLASS W/O NOTIFS:** A list of user classes to be assigned update authority for this service. All persons assigned to the user classes included have update authority with the current service.

**ADMINISTRATIVE UPDATE USER:** A list of the users for a service who can perform Administrative Completes (Completes without a note attached). Optionally, this individual can be set as a notification recipient.

**ADMINISTRATIVE UPDATE TEAM:** This is a list that contains the names of team lists from the OE/RR LIST (#100.21) file. All provider/users of the teams will have administrative update authority for requests directed to this service and the teams can optionally be designated as notification recipients.

**PROCESS PARENTS FOR UPDATES:** This field, if set to YES, will cause the parent services of this service to be screened to determine update authority for a given user. Hence, if an individual is set as an update user in a grouper service, this individual will have privileges for all sub-services that have this field set.

**SPECIAL UPDATES INDIVIDUAL:** This individual will have privileges to perform group status updates for this service or any of the entries in the SUB-SERVICE/SPECIALTY field. It is recommended that this individual be a responsible service update user or a Clinical Application Coordinator. If given the option Group update of consult/procedure requests [GMRCSTSU], the user will be able to choose all requests within a date range that are pending, active or both and update the request to discontinued or complete. This will also update the related order in CPRS to the same status.

**UNRESTRICTED ACCESS:** This field, if set to yes will allow all users to perform the full range of update activities on consult or procedure requests directed to this service. If this field is set to yes, all other fields related to assignment of update users are ignored. The SERVICE INDIVIDUAL TO NOTIFY and the SERVICE TEAM(S) TO NOTIFY fields are still used to determine notification recipients for each individual service.

**SUB-SERVICE/SPECIALTY:** This is the list of sub-service/specialties that are grouped under this Service. The sub-service/specialty entries must each be defined as entries in this file. There is no limit on how deep the hierarchy of services may be defined. The only requirement is that the "ALL SERVICES" entry be at the top of the hierarchy.

**PROCEDURE TYPE:** This multiple allows procedures to be associated with the services that are responsible for processing the procedure. If multiple services process a particular procedure, the ordering physician must specify which service the procedure should go to.

Example:

In this example a new service, arthritis, is set up:

```
Select Consult Management Option: SS Set up Consult Services
Select Service/Specialty: ARTHRITIS
  Are you adding 'ARTHRITIS' as a new REQUEST SERVICES (the 38TH)? No// Y
  (Yes)
SERVICE NAME: ARTHRITIS// <Enter>
ABBREVIATED PRINT NAME (Optional): ARTH
Select SYNONYM: AR
  Are you adding 'AR' as a new SYNONYM (the 1ST for this REQUEST SERVICES)? No//
Y
  (Yes)
Select SYNONYM: <Enter>
SERVICE USAGE: ?
  Enter '1' if the service is Grouper Only, 2 if the service is to be used
  for TRACKING Only, and 9 to DISABLE the service.
  Choose from:
    1      GROUPER ONLY
    2      TRACKING ONLY
    9      DISABLED
SERVICE USAGE: 2 TRACKING ONLY
SERVICE PRINTER: LASER
  1  LASER          PRINTER ROOM LN11 12 PITCH      _LTA36:          P-LN03.1
2
  2  LASERJET 4SI      OVER THERE      _LTA318:          P-HPLASER-P12
  3  LASERJET COMPRESSED      NORTHWEST QUAD      _LTA318:          P-HPL
J3-COMPR. PORT MODE
CHOOSE 1-3: 1  LASER          PRINTER ROOM LN11 12 PITCH      _LTA36:          P-LN
03.12
NOTIFY SERVICE ON DC: <Enter>
REPRINT 513 ON DC: <Enter>
PROVISIONAL DX PROMPT: <Enter>
PROVISIONAL DX INPUT: <Enter>
PREREQUISITE:
  1> <Enter>
DEFAULT REASON FOR REQUEST:
  1> <Enter>
RESTRICT DEFAULT REASON EDIT: <Enter>
SERVICE INDIVIDUAL TO NOTIFY: SNOW,CHARLES R.          CRS          PHYSICIAN
Select SERVICE TEAM TO NOTIFY: <Enter>
Select NOTIFICATION BY PT LOCATION: <Enter>
PROCESS PARENTS FOR NOTIFS: <Enter>
Select UPDATE USERS W/O NOTIFICATIONS: DENT,STUART          SD          MEDICAL S
TUDENT III
  Are you adding 'DENT,STUART' as
  a new UPDATE USERS W/O NOTIFICATIONS (the 1ST for this REQUEST SERVICES)? No
// Y
  (Yes)
Select UPDATE USERS W/O NOTIFICATIONS: GEROFMIS,MANNI          MG          CHIEF,
MIS
  Are you adding 'GEROFMIS,MANNI' as
  a new UPDATE USERS W/O NOTIFICATIONS (the 2ND for this REQUEST SERVICES)? No
// Y
  (Yes)
Select UPDATE USERS W/O NOTIFICATIONS: <Enter>
Select UPDATE TEAMS W/O NOTIFICATIONS: RED
  Are you adding 'RED' as
```

```

    a new UPDATE TEAMS W/O NOTIFICATIONS (the 1ST for this REQUEST SERVICES)? No
// Y
(Yes)
Select UPDATE TEAMS W/O NOTIFICATIONS: <Enter>
Select UPDATE USER CLASS W/O NOTIFS: ORTHOTIST/PROSTHETIST
Are you adding 'ORTHOTIST/PROSTHETIST' as
a new UPDATE USER CLASSES W/O NOTIFS (the 1ST for this REQUEST SERVICES)? No
// Y
(Yes)
Select UPDATE USER CLASS W/O NOTIFS: RHEUMATOLOGIST
Are you adding 'RHEUMATOLOGIST' as
a new UPDATE USER CLASSES W/O NOTIFS (the 2ND for this REQUEST SERVICES)? No
// Y
(Yes)
Select UPDATE USER CLASS W/O NOTIFS: <Enter>
Select ADMINISTRATIVE UPDATE USERS: CLERK, F CLERK,F.W.D. FWDC
MEDICAL RECORD TECHNICIAN
Are you adding 'CLERK,F.W.D.' as
a new ADMINISTRATIVE UPDATE USERS(the 1ST for this REQUEST SERVICES)? No
// Y
(Yes)

Select NOTIFICATION RECIPIENT: <Enter>
Select ADMINISTRATIVE UPDATE USERS: <Enter>
Select ADMINISTRATIVE UPDATE TEAMS: <Enter>
PROCESS PARENTS FOR UPDATES: Y YES
SPECIAL UPDATES INDIVIDUAL: WELBY,MARCUS MW CHIEF, MEDICAL SERV
ICE
UNRESTRICTED ACCESS: N NO
Select SUB-SERVICE/SPECIALTY: <Enter>
Select PROCEDURE TYPE: <Enter>

Add/Edit Another Service? N// <Enter>

Select Consult Management Option:

```



**Note:** When you create a new service, it is *not* automatically linked into the Consults hierarchy. You must explicitly group each service under ALL SERVICES or under another service that in turn is grouped under ALL SERVICES. Until this is done, the new service is not visible in the service hierarchy and cannot be selected for any action.

Use the Set Up Consult Services (SS) action to group services. In the following example, we group the ARTHRITIS service under ALL SERVICES:

```
Select Consult Management Option: SS Set up Consult Services
SERVICE NAME: ALL SERVICES
ABBREVIATED PRINT NAME (Optional): <Enter>
Select SYNONYM: <Enter>
SERVICE USAGE: GROUPER ONLY//<Enter>
SERVICE PRINTER: <Enter>
NOTIFY SERVICE ON DC: <Enter>
REPRINT 513 ON DC: <Enter>
PROVISIONAL DX PROMPT: <Enter>
PROVISIONAL DX INPUT: <Enter>
PREREQUISITE:
  1> <Enter>
DEFAULT REASON FOR REQUEST:
  1> <Enter>
RESTRICT DEFAULT REASON EDIT: <Enter>

SERVICE INDIVIDUAL TO NOTIFY: <Enter>
Select SERVICE TEAM TO NOTIFY: <Enter>
Select NOTIFICATION BY PT LOCATION: <Enter>
PROCESS PARENTS FOR NOTIFS: <Enter>

Select UPDATE USERS W/O NOTIFICATIONS: <Enter>
Select UPDATE USER CLASS W/O NOTIFS: <Enter>
Select ADMINISTRATIVE UPDATE USER: <Enter>
Select ADMINISTRATIVE UPDATE USER: <Enter>
Select ADMINISTRATIVE UPDATE TEAM: <Enter>
PROCESS PARENTS FOR UPDATES: <Enter>

SPECIAL UPDATES INDIVIDUAL: <Enter>
UNRESTRICTED ACCESS: <Enter>
Select SUB-SERVICE/SPECIALTY: Oncology// ARTHRITIS
  Are you adding 'ARTHRITIS' as a new SUB-SERVICE (the 15TH for this REQUEST SERVICES)? No// Y
    (Yes)
      MNEMONIC: <Enter>
Select SUB-SERVICE/SPECIALTY: <Enter>
Select PROCEDURE TYPE: <Enter>

Add/Edit Another Service?
```

## Quick Orders

Enter/edit quick orders [ORCM QUICK ORDERS] is available within the Order Menu Management (ORCM MGMT) option of the CPRS Configuration (Clin Coord) menu. There are two steps to setting up a quick order:

1. Define the quick order with the Enter/edit quick orders option of the Order Menu Management menu.
2. Put the quick order on an order entry menu with the Enter/edit order menus option of the Order Menu Management menu.

In the following example we set up a quick order called NUTRITION:

```
Select Order Menu Management Option: ?

OI      Enter/edit orderable items
PM      Enter/edit prompts
GO      Enter/edit generic orders
QO      Enter/edit quick orders
ST      Enter/edit order sets
AC      Enter/edit actions
MN      Enter/edit order menus
AO      Assign Primary Order Menu
CP      Convert protocols
SR      Search/replace components

Enter ?? for more options, ??? for brief descriptions, ?OPTION for help text.

Select Order Menu Management Option: QO  Enter/edit quick orders
Select QUICK ORDER NAME: NUTRITION
NAME: NUTRITION// <Enter>
DISPLAY TEXT: NUTRITION CONSULT
VERIFY ORDER:
DESCRIPTION:
  1>Nutrition Consult
  2><Enter>
EDIT Option: <Enter>

Consult to Service/Specialty: DIETARY
Reason for Request: . . .
  1> [ ] food preferences by pt request   [ ] nutrition assessment
  2> [ ] chewing/swallowing problems     [ ] nutrient intake study (calories)
  3> [ ] recommended oral supplements    [ ] recommended diet order
  4> [ ] malnutrition - diagnosis         [ ] NPO/clear liquids > 5 days
  5> [ ] initiate tube feeding           [ ] monitor tube feeding
  6> [ ] renal nutrition consult          [ ] diet instruction
  7> [ ] see MD re:patient                 [ ] schedule to nutrition class
  8> [ ] 10-1 referral                    [ ] outpatient nutrition education
  9>
10>Present Diagnosis:
11>Nutritionally relevant PMH/PSH:
12>Current diet rx:
13>Current albumin:                      Date:
14>Current weight (kg):                  Date:
15>H/O wt changes or problems with intake:
16>
```

```

17>          ****   Fill in this form before transmitting   ****
18><Enter>
EDIT Option: <Enter>
Category: <Enter>
Urgency: <Enter>
Place of Consultation: <Enter>
Attention: <Enter>
Provisional Diagnosis: <Enter>

-----
Consult to Service/Specialty: DIETARY
      Reason for Request:  [ ]food preferences by pt request  [ ]n ...
-----

(P)lace, (E)dit, or (C)ancel this quick order? PLACE// <Enter>

Select QUICK ORDER NAME: <Enter>

Select Order Menu Management Option: MN  Enter/edit order menus
Select ORDER MENU: OR GMENU OTHER ORDERS

```

```

Menu Editor          Mar 31, 1998 13:18:25          Page:    1 of    3
Menu: OR GMENU OTHER ORDERS          Column Width: 26
  1          2          3          4
|0  CONSULT...      30 PROCEDURE...
|   Family/Marriage Counsel
|
|+
|
|1
|
|+
|
+ + Next Screen - Prev Screen ?? More Actions      >>>
  Menu Items          Text or Header          Row
Add: me  Menu Items
ITEM: NU

```

```

  1  NUTRITION
  2  NURSING OR GXNURS NURSING ITEM
CHOOSE 1-2: 1  NUTRITION
ROW: 3
COLUMN: 1
DISPLAY TEXT: Nutrition
MNEMONIC: NU

ITEM: <Enter>

Rebuilding menu display ...

```

```

Menu Editor          Mar 31, 1998 13:20:13          Page:    1 of    3

```

Menu: OR GMENU OTHER ORDERS			Column Width: 26
1	2	3	4
0	CONSULT...	30	PROCEDURE...
	Family/Marriage Counsel		
NU	Nutrition		
+			
1			
+			
+      + Next Screen   - Prev Screen   ?? More Actions      >>>			
	Add ...	Edit ...	Assign to User(s)    Select New Menu
	Remove ...	Toggle Display	Order Dialogs ...    Quit
Select Action: Next Screen//			



## Consult Type Protocols

To define "Procedure Request" orderable items for use during the Add New Orders process, use the "Set up Consult/ Request Protocols" option on the GMRC MGR menu. See the **Set up Consults Protocols** section of this manual for examples and assistance in setting up your protocols. All "Procedure Request" protocols created by this option are automatically prefixed with GMRCR and automatically copied to the Orderable Items file (101.43).

After defining procedure requests, use the "Protocol Menu Edit Option" in the Clinical Coordinator's Order Menu Management (MM) menu to add GMRCOR REQUEST an Add New Orders menu.

## Consult Tracking Reports

The Consult Tracking Reports [GMRC REPORTS] option provides seven on-screen reports. They are:

- 1) Completion Time Statistics (ST) for QA and others interested in volume and service turn-around times.
- 2) Service Consults Pending Resolution (PC) helps users track individual consults.
- 3) Service Consults Completed (CC) for management and others interested in volume.
- 4) Service Consults Completed or Pending Resolution (CP) for clerical staff and others interested in pending consults.
- 5) Service Consults by Status either with or without Consults Numbers (NU and SC).

Additionally, the Completion Time Statistics and Service Consults by Status (with consult numbers) can be printed out in hard-copy.

The Service Consults Pending Resolution [GMRC RPT PENDING CONSULTS] option may be added to a service user's primary or secondary option menu. See the *Consult/Request Tracking User Manual* for details related to this option. This option is also contained on the Consult Service Tracking and Pharmacy TPN Consults menus.

## Service Consults Pending Resolution

The purpose of the Service Consults Pending Resolution option is to list the pending and active consults. Use it to stay informed about the overall status of consults for your service. Someone in each clinic or service should review this list daily to make sure that all consults are being attended to.

In the following example, the option is used to view pending and active Pulmonary consults:

```
Select Consult Service Tracking Option: ?

    CS      Consult Service Tracking
    PC      Service Consults Pending Resolution
    ST      Completion Time Statistics

Enter ?? for more options, ??? for brief descriptions, ?OPTION for help text.

Select Consult Service Tracking Option: PC  Service Consults Pending Resolution
Select Service/Specialty: PULMONARY
```

GMRC PENDING CONSULTS			Oct 08, 1997 08:16:39		Page:	1 of 2
SERVICE CONSULTS PENDING RESOLUTION						
To Service: PULMONARY						
Status	Last Action		Request Date	Patient Name	Pt Location	
Pending	ENTERED	IN OE/RR	10/07/97	DINARO,M. (3779)	PULMONARY CLINIC	
Pending	ENTERED	IN OE/RR	10/07/97	SMITH,S. (1462)	PULMONARY CLINIC	
Pending	ENTERED	IN OE/RR	10/07/97	RAMBO,J. (1239)	PULMONARY CLINIC	
Pending	ENTERED	IN OE/RR	05/06/97	HOLMES,S. (5377)		
Pending	COMPLETED		05/06/97	HOLMES,S. (5377)		
Active	ENTERED	IN OE/RR	09/04/97	RUSSELL,D. (4455)	2B	
Active	ENTERED	IN OE/RR	08/21/97	HOOD,R. (2591)	1A	
Active	ENTERED	IN OE/RR	08/21/97	DOE,W. (6572)	1A	
Active	ENTERED	IN OE/RR	08/21/97	ANDERSON,H. (3456)	2B	
Active	ENTERED	IN OE/RR	07/21/97	BUD,R. (1996)	2B	
Active	ENTERED	IN OE/RR	07/16/97	STONE,J. (2432)	1A	
Active	ENTERED	IN OE/RR	05/21/97	ANDERSON,H. (3456)	2B	
Active	ENTERED	IN OE/RR	05/21/97	DOE,W. (6572)	PULMONARY CLINIC	
Active	ENTERED	IN OE/RR	02/03/97	NIVEK,A. (8796)		
Active	ENTERED	IN OE/RR	02/03/97	NIVEK,A. (8796)		
Active	ENTERED	IN OE/RR	01/15/97	HARDY,T. (9600)	1A	
+ Enter ?? for more actions						
Select Item(s): Next Screen//						

## Service User Management (SU)

This option is used to make the most commonly needed changes after a service has been created. This option changes fields that are all in records in the REQUEST SERVICES (#123.5) file They are:

**SERVICE INDIVIDUAL TO NOTIFY:** An individual who will receive a default notification of any action taken on a consult.

**SERVICE TEAM TO NOTIFY:** The name of the Service Team that is to receive notifications of any actions taken on a consult.

**NOTIFICATION BY PT LOCATION:** The name of a hospital location that is to receive notifications of any actions taken on a consult.

**UPDATE USERS W/O NOTIFICATIONS:** The name of an individual who can do update tracking, but who will not get a notification.

**UPDATE TEAMS W/O NOTIFICATIONS:** A team list of users to be assigned update authority for this service.

**UPDATE USER CLASS W/O NOTIFS:** A user class to be assigned update authority for this service.

**ADMINISTRATIVE UPDATE USER:** An individual who can perform Administrative Completes (Completes without a note attached).

**ADMINISTRATIVE UPDATE TEAM:** A team who can perform Administrative Completes (Completes without a note attached).

**SPECIAL UPDATES INDIVIDUAL:** This is the individual who can perform special updates for this particular service.

In order for the Service users to actually receive the notification, the users must have the notification “NEW SERVICE CONSULT/REQUEST” turned **ON** for their use. See the *CPRS Clinical Coordinator & User Manual*, NOTIFICATION MGMT MENU option for more information on notifications and how to set them up.

Teams of users may be defined by an individual or team members with access to the “Team Management Menu” provided by CPRS. See the *CPRS Clinical Coordinator & User Manual* for more information on Team Management and its recommended menu access. It is important to know that team users are sent the notification **regardless** of any patients who may be defined in that team list.

The Service User Management sub-option for setting up teams, locations, etc., may be found in the GMRC MGR, Consult Management option. An example of setting up notifications is shown on the next page.

In the following example no changes are made. The prompts in the Service User Management option are cycled through so you can see what they are:

```
Select OPTION NAME:      GMRC MGR          Consult Management      menu

Select Consult Management Option: SU  Service User Management

Select Service/Specialty: ARTHRITIS
SERVICE INDIVIDUAL TO NOTIFY: AUTRY,GENE//
Select SERVICE TEAM TO NOTIFY:
Select NOTIFICATION BY PT LOCATION:

Select UPDATE USERS W/O NOTIFICATIONS: SNOW,CHARLES R
//
Select UPDATE TEAMS W/O NOTIFICATIONS:
Select UPDATE USER CLASS W/O NOTIFS:
Select ADMINISTRATIVE UPDATE USER:
Select ADMINISTRATIVE UPDATE TEAM:
SPECIAL UPDATES INDIVIDUAL:

Select Service/Specialty:
```

The individual and team names that are displayed are the current default values. In most cases they are the most recently used value for that prompt.

To set up an individual to have update activities but receive no notification, do the following. This example sets up Marcus Welby to have update privileges:

```
Select OPTION NAME:      GMRC MGR          Consult Management      menu

Select Consult Management Option: SU  Service User Management

Select Service/Specialty: MEDICINE
SERVICE INDIVIDUAL TO NOTIFY: AUTRY,GENE//
Select SERVICE TEAM TO NOTIFY:
Select NOTIFICATION BY PT LOCATION:

Select UPDATE USERS W/O NOTIFICATIONS: SNOW,CHARLES R
      // ?
  Answer with UPDATE USERS W/O NOTIFICATIONS
Choose from:
  RASKELL,JOEL
  HALE,VICKI
  JENSEN,CHARLES
  SNOW,CHARLES R.

      You may enter a new UPDATE USERS W/O NOTIFICATIONS, if you wish
      Enter the name of individual who can do update tracking, but who will
      not get a notification.
  Answer with NEW PERSON NAME, or INITIAL, or SSN, or VERIFY CODE, or
  NICK NAME, or KEY DELEGATION LEVEL, or DEA#, or VA#, or
  SOCIAL WORKER ?, or POSITION/TITLE, or TRANSCRIPTIONIST ID, or
  ALIAS
  Do you want the entire 101-Entry NEW PERSON List? N  (No)
Select UPDATE USERS W/O NOTIFICATIONS: SNOW,CHARLES R.
      // WELBY,MARCUS          MW          CHIEF, MEDICAL SERVICE
  Are you adding 'WELBY,MARCUS' as
  a new UPDATE USERS W/O NOTIFICATIONS (the 5TH for this REQUEST SERVICES)? No
// Y
  (Yes) ??
Select UPDATE USERS W/O NOTIFICATIONS: WELBY,MARCUS
      // <Enter>
Select UPDATE TEAMS W/O NOTIFICATIONS:
Select UPDATE USER CLASS W/O NOTIFS:
Select ADMINISTRATIVE UPDATE USER:
Select ADMINISTRATIVE UPDATE TEAM:
SPECIAL UPDATES INDIVIDUAL:
Select Service/Specialty: <Enter>

Select Consult Management Option:
```

Sometimes it is necessary to administratively Complete (CT) consults that for one reason or another have not been resolved. To set up an individual who can complete other people's consults do the following. This example sets up F. W. D. Clerk as an administrative user who can complete any Medicine Consult without a signature.

```
Select Consult Management Option: SU  Service User Management

Select Service/Specialty: MEDICINE
SERVICE INDIVIDUAL TO NOTIFY: AUTRY,MIKE// <Enter>
Select SERVICE TEAM TO NOTIFY: GOLD TEAM// <Enter>
Select NOTIFICATION BY PT LOCATION: 1A// <Enter>
  NOTIFICATION BY PT LOCATION: 1A// <Enter>
  INDIVIDUAL TO NOTIFY: <Enter>
  TEAM TO NOTIFY: <Enter>
Select NOTIFICATION BY PT LOCATION: <Enter>

Select UPDATE USERS W/O NOTIFICATIONS: MASON,MARCIA D
  // <Enter>
Select UPDATE TEAMS W/O NOTIFICATIONS: <Enter>
Select UPDATE USER CLASS W/O NOTIFS: <Enter>
Select ADMINISTRATIVE UPDATE USER: CASEY  CASEY,BEN           BC           ASST CHI
EF, MEDICAL SERVICE
  Are you adding 'CASEY,BEN' as
    A new ADMINISTRATIVE UPDATE USERS (the 1ST for this REQUEST SERVICES)? No//
Y
  (Yes)
  NOTIFICATION RECIPIENT: <Enter>
Select ADMINISTRATIVE UPDATE USER: <Enter>
Select ADMINISTRATIVE UPDATE TEAM: <Enter>
SPECIAL UPDATES INDIVIDUAL: <Enter>

Select Service/Specialty: Select Service/Specialty: <Enter>

Select Consult Management Option:
```

To set up an individual who has update privileges and receives “NEW SERVICE CONSULT/REQUEST” notifications do the following. This example sets up Dr. Maven to receive alerts when a consult comes to the Medicine clinic:

```
Select OPTION NAME: GMRC MGR          Consult Management      menu

Select Consult Management Option: SU  Service User Management

Select Service/Specialty: MEDICINE

SERVICE INDIVIDUAL TO NOTIFY: MORROW,BECKY// MAVEN,MARCIE J      MC
      PHYSICIAN
Select SERVICE TEAM TO NOTIFY: <Enter>
Select NOTIFICATION BY PT LOCATION: <Enter>

Select UPDATE USERS W/O NOTIFICATIONS: SNOW,CHARLES R
      // <Enter>
Select UPDATE TEAMS W/O NOTIFICATIONS: <Enter>
Select UPDATE USER CLASS W/O NOTIFS: <Enter>
Select ADMINISTRATIVE UPDATE USER: JENSEN,CHARLES
      // <Enter>
      ADMINISTRATIVE UPDATE USER: JENSEN,CHARLES// <Enter>
      NOTIFICATION RECIPIENT: <Enter>
Select ADMINISTRATIVE UPDATE USER: <Enter>
Select ADMINISTRATIVE UPDATE TEAM: <Enter>
SPECIAL UPDATES INDIVIDUAL: JENSEN,CHARLES// <Enter>

Select Service/Specialty:
```



To set up a predefined team of clinicians for a service that has update privileges and receives NEW SERVICE CONSULT/REQUEST notifications do the following. In this example, to set up the Gold team to receive notifications do the following: (Team set up is discussed in the *CPRS Clinical Coordinator & User Manual*.)

```
Select OPTION NAME: GMRC MGR          Consult Management      menu

Select Consult Management Option: SU  Service User Management

SERVICE INDIVIDUAL TO NOTIFY: MORROW,BECKY// <Enter>
Select SERVICE TEAM TO NOTIFY: GOLD
Select NOTIFICATION BY PT LOCATION: <Enter>

Select UPDATE USERS W/O NOTIFICATIONS: SNOW,CHARLES R
      // <Enter>
Select UPDATE TEAMS W/O NOTIFICATIONS: <Enter>
Select UPDATE USER CLASS W/O NOTIFS: <Enter>
Select ADMINISTRATIVE UPDATE USER: JENSEN,CHARLES
      // <Enter>
      ADMINISTRATIVE UPDATE USER: JENSEN,CHARLES// <Enter>
      NOTIFICATION RECIPIENT: <Enter>
Select ADMINISTRATIVE UPDATE USER: <Enter>
Select ADMINISTRATIVE UPDATE TEAM: <Enter>
SPECIAL UPDATES INDIVIDUAL: JENSEN,CHARLES// <Enter>

Select Service/Specialty:
```

To set up individuals and a predefined team associated with a hospital ward location that have update activities and receives “NEW SERVICE CONSULT/REQUEST” notifications: (In this example we set up ward 2B Medical to receive notifications, along with Dr. Snow and the Green team. Team set up is discussed in the *CPRS Clinical Coordinator & User Manual*.) The users entered in the NOTIFICATION BY LOCATION sub-fields will **ONLY** be notified if the requesting location for the consult matches the location for which they are entered here. So in the case of the following example SNOW, CHARLES would only be notified for consults coming from 2B MED

```
Select Consult Management Option: SU Service User Management

Select Service/Specialty: MEDICINE
SERVICE INDIVIDUAL TO NOTIFY: MORROW,BECKY// <Enter>
Select SERVICE TEAM TO NOTIFY: <Enter>
Select NOTIFICATION BY PT LOCATION: 1A// 2B

    Searching for a Enter Ward Location
    1    2B    2B
    2    2B MED    2B MED
CHOOSE 1-2: 2    2B MED
    INDIVIDUAL TO NOTIFY: SNOW,CHARLES R.          CRS          PHYSICIAN
    TEAM TO NOTIFY: GREEN
Select NOTIFICATION BY PT LOCATION: <Enter>
Select UPDATE USERS W/O NOTIFICATIONS: SNOW,CHARLES R
    // <Enter>
Select UPDATE TEAMS W/O NOTIFICATIONS: <Enter>
Select UPDATE USER CLASS W/O NOTIFS: <Enter>
Select ADMINISTRATIVE UPDATE USER: JENSEN,CHARLES
    // <Enter>
    ADMINISTRATIVE UPDATE USER: JENSEN,CHARLES// <Enter>
    NOTIFICATION RECIPIENT: <Enter>
Select ADMINISTRATIVE UPDATE USER: <Enter>
Select ADMINISTRATIVE UPDATE TEAM: <Enter>
SPECIAL UPDATES INDIVIDUAL: JENSEN,CHARLES// <Enter>

Select Service/Specialty:
```

## Group Update (GU)

A Group Update can only be performed by an individual who has been set as the Special Updates Individual with the Set Up Consult Service (SS) or Service User Management (SU) option of the Consult Management (GMRC MGR) menu. This option should be exercised with great care because it can affect a large number of consults.

In this example, all consults over 30 days that still have an pending status are discontinued for a specific service:

```
Select Consult Management Option: SU  Service User Management

Select Service/Specialty: ALL SERVICES// MARCIA'S SPECIALTY

The first order in Consults has an entry date of MAR 28,1992

Update Status Start Date:  MAR 28,1992// <Enter>  (MAR 28, 1992)
Update Status Stop Date:   T-30  (APR 10, 2000)

    Select one of the following:

        P          Pending
        A          Active
        B          Both

Status(es) to search for updating: P  Pending

If orders in the date range still have the selected status, this option
will change their status in consults, and update the order.

You may change the status to COMPLETE or DISCONTINUED.

Change their status to: DIS  Discontinued

A comment will be stored with each record updated
Enter text of comment: Discontinue old consults ref.
Records will be updated for:
-----
    Service: MARCIA'S SPECIALTY
    Beginning: Mar 28, 1992
    Ending: Apr 10, 2000
    Update: Pending consults
    To: DISCONTINUED
    Update Comment:
    Discontinue old consults
-----

Is this correct? NO// Y  YES

Searching database for entries matching search criteria
.....

    Select one of the following:

        1          Print report only
        2          Print report & update records
        3          Quit
```

Choose the method to handle the report: **2** Print report & update records

The device selected will print a list of entries from file 123 that will be updated to DISCONTINUED.

If you choose to update records, the update of the consult entries will take place upon completion of the report.

It is highly advised that a printer be selected!

Select device for report: **LASER** LASERJET 4SI MARCIE'S CUBE Right Margin: 80  
//

Do you want your output QUEUED? NO// **<Enter>** (NO)

Select Consult Management Option:

## Print Test Page (TP)

Sometimes the pagination on SF 513 is correct on some printers but incorrect on others. The Print Test Page command is provided for diagnosing incorrectly paginated SF 513s. Instructions for correcting this situation are printed with the test page. Bring the test page to IRM for resolution of the problem.

In this example, we run the Print Test Page option on a specified printer:

```
Select Consult Management Option: TP  Print Test Page

Print consults printer setup page.

DEVICE: HOME// LAZER  PRINTER ROOM LN11 12 PITCH      Right Margin: 80//

Do you want your output QUEUED? NO// <Enter>  (NO)

Select Consult Management Option:
```

## Determine Users' Update Authority (UA)

Sometimes it is necessary to quickly check on the authority of a service user. The Determine Users' Update Authority option of the Consults Management menu does this.

In this example, the authority for Dr. Snow is checked for the Cardiology service:

```
Select Consult Management Option: UA Determine users' update authority

This option will allow you to check a user's update authority for any given
service in the consults hierarchy. If the PROCESS PARENTS FOR UPDATES field
is set to YES, all ancestors of the selected service will be checked.
The type of update authority and the service to which they are assigned will
be displayed.

Select Consult Service: CARDIOLOGY
Choose user to check for update status: SNOW SNOW,CHARLES R. CA
MD Surgeon

This user is an update user for: CARDIOLOGY
via the UPDATE USERS W/O NOTIFICATIONS field.

Select Consult Service:
```

## Determine if User is Notification Recipient (UN)

Sometimes it is necessary to quickly check a user's notification status for a service. The Determine if User is Notification Recipient option of the Consults Management menu accomplishes this.

In the following example Dr. Snow notification status is checked for the Podiatry Clinic:

Select Consult Management Option: <b>UN</b> Determine if user is notification recipient			
This option will list how a given user became a notification recipient for a selected consult service. If the PROCESS PARENTS FOR NOTIFS field is set to YES, all the parents of the service will also be processed to determine if the user is a recipient via that service.			
Select Consult Service: <b>POD</b> FOOT CLINIC			
Choose notification recipient: <b>SNOW</b>	SNOW, CHARLES R	CRS	PHYSICIAN
This user is a notification recipients for FOOT CLINIC			
Select Consult Service:			

## Determine Notification Recipients for a Service (NR)

Occasionally it is necessary to see the entire list of notification recipients for a service. The Determine Notification Recipients for a Service option of the Consults Management menu performs the function.

In the following example, notification recipients are listed for the Medicine service:

Select Consult Management Option: <b>NR</b> Determine notification recipients for a service Select Service: <b>MEDICINE</b>
--

Consult Notif Recipients	May 10, 2000 19:46:44	Page: 1 of 1
Notification Recipients for: MEDICINE		
Notification Recipient	Service	
ANDERSON, DOCTOR	MEDICINE	
AUTRY, GENE	MEDICINE	
SNOW, CHARLES R	MEDICINE	
CASEY, BEN	MEDICINE	
EATON, SCHOLAR	MEDICINE	
FROM, HERE	MEDICINE	
ARNSLEY, MARIE L	MEDICINE	
MACLENAHAN, MARGIE	MEDICINE	
MACDANIEL, RIGHT	MEDICINE	
RUTHE, BABE (HENRY)	MEDICINE	
TRUSS, DOOBIE	MEDICINE	
Enter ?? for more actions		
SS Select new Service		
Select Item(s): Quit//		



## Test Default Reason for Request (TD)

The Test Default Reason for Request option of the Consults Management menu is provided so that the boilerplate entered in the default reason for request can be tested. It is important to test this boilerplate, especially if it contains TIU objects (TIU objects are contained in vertical bars as such: |PATIENT NAME|.)

TIU can vary from site to site. There are only a certain number of objects that are common to all sites—these are the Supported Objects. The following table contains a list of these objects:

Object Name	Object Name
ACTIVE MEDICATIONS	PATIENT HEIGHT
ACTIVE MEDICATIONS	PATIENT NAME
ACTIVE MEDS COMBINED	PATIENT RACE
ALLERGIES/ADR	PATIENT RELIGION
BLOOD PRESSURE	PATIENT SEX
CURRENT ADMISSION	PATIENT SSN
DETAILED ACTIVE MEDS	PATIENT WEIGHT
DETAILED RECENT MEDS	PULSE
NOW	RECENT MEDICATIONS
PAIN	RECENT MEDS COMBINED
PATIENT AGE	RESPIRATION
PATIENT DATE OF BIRTH	TEMPERATURE
PATIENT DATE OF DEATH+ Status	TODAY'S DATE

Further information about objects can be obtained at the following VA intranet address:

[vista.med.va.gov/softserv/clin\\_bro.ad/tiu/html/objects.html](http://vista.med.va.gov/softserv/clin_bro.ad/tiu/html/objects.html)

In the following example, we first use the SS option to enter a default reason for request as such:

```
. . .  
DEFAULT REASON FOR REQUEST:  
1>|PATIENT NAME| is a |PATIENT AGE| y/o |PATIENT RACE| |PATIENT SEX|  
2>currently taking |ACTIVE MEDICATIONS|  
3>  
4>  
5>Allergies:  
6>|ALLERGIES/ADR|  
7>  
8>Latest BP: |BLOOD PRESSURE|  
9>  
10>Patient to be seen for full cardiac evaluation.  
EDIT Option: <Enter>  
. . .
```

Now, to check this we use the TD option to check this for a specific patient:

Select Consult Management Option: **TD** Test Default Reason for Request  
Select Service: **CARDIOLOGY**  
Select PATIENT: **BABBITT,THEODORE** 5-19-46 448668832 YES SC VETER  
AN  
Enrollment Priority: Category: IN PROCESS End Date:  
Gathering Allergy Data..

Default Reason for Request May 10, 2000 20:15:56 Page: 1 of 1  
Service: CARDIOLOGY  
Patient: BABBITT,THEODORE

---

BABBITT,THEODORE is a 53 y/o BLACK, NOT OF HISPANIC ORIGIN MALE  
currently taking Active Inpatient Medications (excluding Supplies):

Pending Inpatient Medications	Status
=====	
1) WARFARIN TAB 10MG PO PRN	PENDING

Allergies:  
BEEF

Latest BP: Blood Pressure: 130/80/100 (06/02/1999 13:17)

Patient to be seen for full cardiac evaluation.

Enter ?? for more actions

SS Select new service SP Select new patient  
Select Item(s): Quit//

## List Consult Service Hierarchy (LH)

This option of the Consults Management menu gives a *complete* list of the Consult Service Hierarchy as it currently exists. All services, including disabled ones, are listed with their current status. At the end of the hierarchy listing it will show any services that are not part of the hierarchy.

In this example we start to list the service hierarchy from our test account on the computer screen:

```
Select Consult Management Option: LH List Consult Service Hierarchy
DEVICE: HOME// <Enter> VAX
```

```
Consult Hierarchy list                                     Page: 1
-----
ALL SERVICES (Grouper Only)
  ARTHRITIS (Tracking Only)
    <CONTACT LENS REQUEST> <Disabled>
    <EYEGLASS REQUEST> <Disabled>
  FOOT CLINIC (Tracking Only)
  GASTROENTEROLOGY
  GERIATRICS
    <HEMATOLOGY> <Disabled>
    <HOME OXYGEN REQUEST> <Disabled>
  HYPERTENSION
  MARCIA'S SPECIALTY
  MEDICINE (Grouper Only)
    CARDIOLOGY
    GASTROENTEROLOGY
    PULMONARY
  MEDICINE VISN
    MEDICINE (EAST)
    MEDICINE, SOUTH
      CARDIOLOGY (SOUTH)

  Press RETURN to continue, ^ to exit:
```

## Duplicate Sub-Service (DS)

The Duplicate Sub-Service option of the Consult Management menu is provided to assist you in debugging your service hierarchy. It displays services that are listed as a sub-service of more than one service. Having a service as a sub-service of more than one other service has undesirable effects on the Consult reports that are generated. It also may have unexpected effects on determining the notification recipients for a particular service.

In this example, we run the DS option on our local test account:

```
Select Consult Management Option: DS Duplicate Sub-Service
Service GASTROENTEROLOGY is a sub service of:
    ALL SERVICES
    MEDICINE

There is 1 service that is a sub-service for more than one service.

Select Consult Management Option:
```

## Notification Parameters

There are four (4) Consults notifications:

- #23 CONSULT/REQUEST RESOLUTION
- #27 NEW SERVICE CONSULT/REQUEST
- #30 CONSULT/REQUEST CANCEL/HOLD
- #63 CONSULT/REQUEST UPDATED

Any user who wants to receive these notifications must have the notifications enabled for themselves. To turn on these notifications, use the Enable/Disable Notifications option of the NOTIFICATION MGMT MENU, ORB NOT MGR MENU.



**NOTE:** Unless Consult notifications are set to mandatory, individual users may use the Enable/Disable My Notifications option of the Notifications Management Menu to individually disable the notifications they do not want to receive.

Also, the deletion parameter for these notifications is set to Individual Recipient. This means that when an individual reviews one of these notifications, the notification is deleted for only that individual. This parameter may be set to All Recipients, in which case a notification is deleted for all recipients when any one of them reviews it.

To change the deletion parameter for any of the Consults notifications, use the Set Deletion Parameters for Notifications option of the Notification Mgmt Menu.

## Consult Service Tracking

### Functionality

The Consult Service Tracking (GMRC SERVICE TRACKING) option is a generic “User” option that:

Provides a “by patient” lookup of consults and procedure requests which is similar to CPRS’s “by patient” lookup of orders.

Provides a “by Service” lookup of consults and procedure requests. Users may select a service/specialty at any level in the hierarchy of services defined by IRMS/ADPAC personnel.



**Note:** The Consults “Select Service (SS)” action lumps all consult and procedure request orders under a Display Group called “CONSULT...” The only way for users to breakdown these orders by request service is to use the “Select Service (SS)” action provided by this option.

Displays a review screen of consults/requests in sequence by inverted “order released date/time” (most recent consults first).

Includes the Service’s “Last Activity” update and the updated CPRS status for each consult/request displayed.

Provides basic “Select Action:” prompt capabilities which parallel CPRS actions.



**Note:** Abbreviations such as RD, PS, DT, RT, SP, SS, and Q are the basic set of paging, drill down and alter context actions that CPRS users are already familiar with. These actions, and a few new ones, are used by the Consults package options at “Select Action:” prompts.

## **Logic Flow**

The following is an illustration of how the GMRC SERVICE TRACKING option determines which menu of actions should be used at a “Select Action:” prompt.

If a new service context is selected via the “Select Service (SS)” action, the Select Action menu will be based on the new selected service’s entry in the Request Services file (#123.5).

## Text Integration Utilities (TIU) Setup

The Text Integration Utilities package is essential for completing consults under V. 3.0. It gives you several benefits not previously available. Among them are the ability to use boilerplate for selected consult types and the ability to file results in the TIU data base.

In this section we first review the process of Consults resulting. Then we present two different document definition hierarchies that may be used for Consults results. Finally, we present the TIU options you need to set up the TIU part of Consults Resulting.

### Consults Resulting Process

The diagram, Consults Resulting Process, shows the consults process with emphasis on the resulting phase. To complete a consult, three things must happen:

- 1) An authorized user must select the complete action.
- 2) The results must be entered or uploaded.
- 3) The results must be signed (and, if appropriate, cosigned).

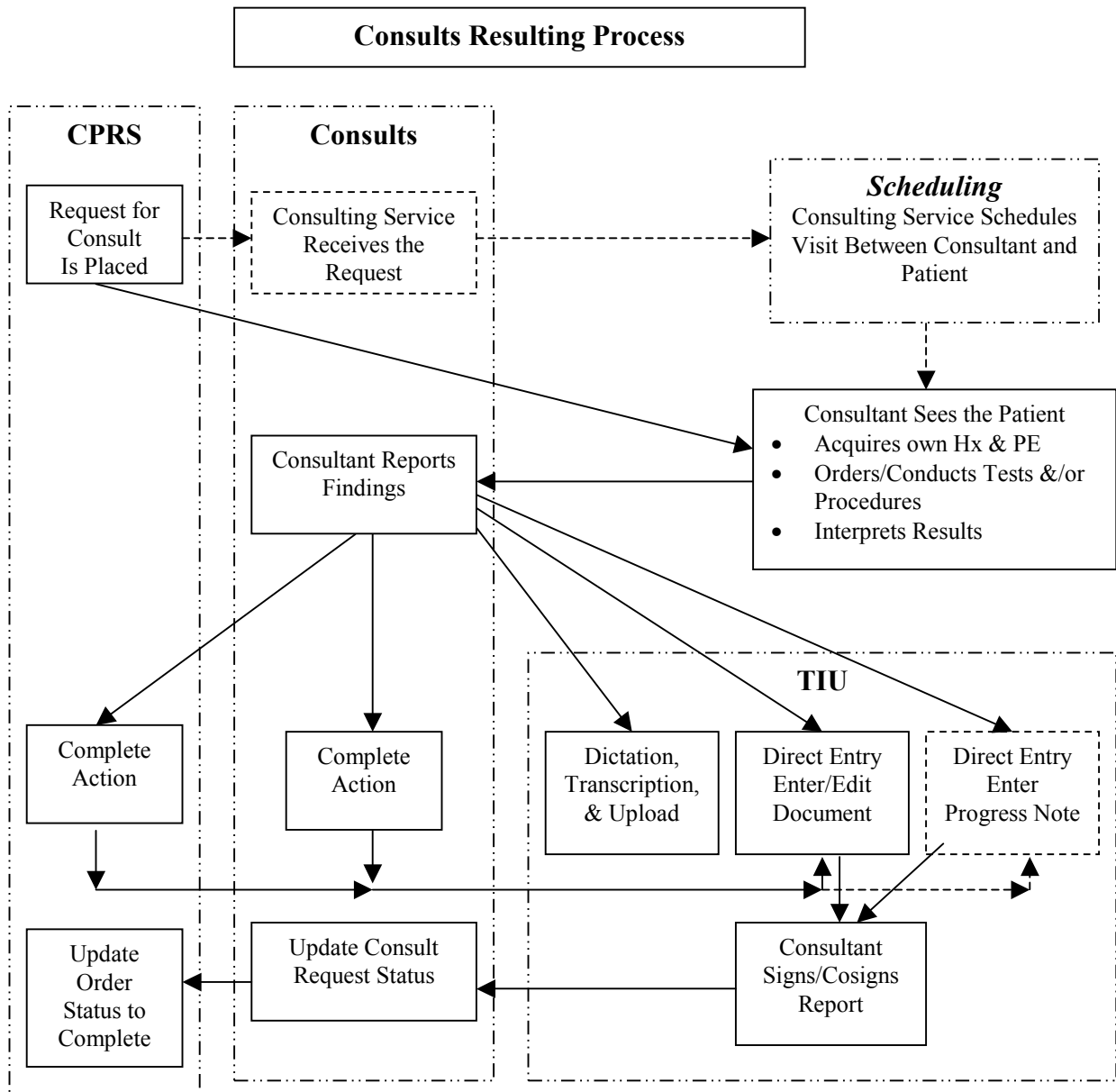
If TIU's upload utility is used, the use of the complete action may be bypassed. TIU generates a notification permitting the responsible person to sign the results and complete the consult.

If the end-user is to enter the results, either the complete action prompts for results, or the results may be entered through TIU directly. If the results are entered through TIU, the user is prompted to link the TIU document with the consult request.

Once these three things are accomplished, the consult is marked as complete and TIU files the results. Also, a chart copy of the completed consult may be printed.

Your site may choose to result consults by use of Progress Notes. In this case the resulting user sees essentially the same prompts, but the results entered are visible both as a consult result and in the Progress Notes system.





## Recommended Document Hierarchies

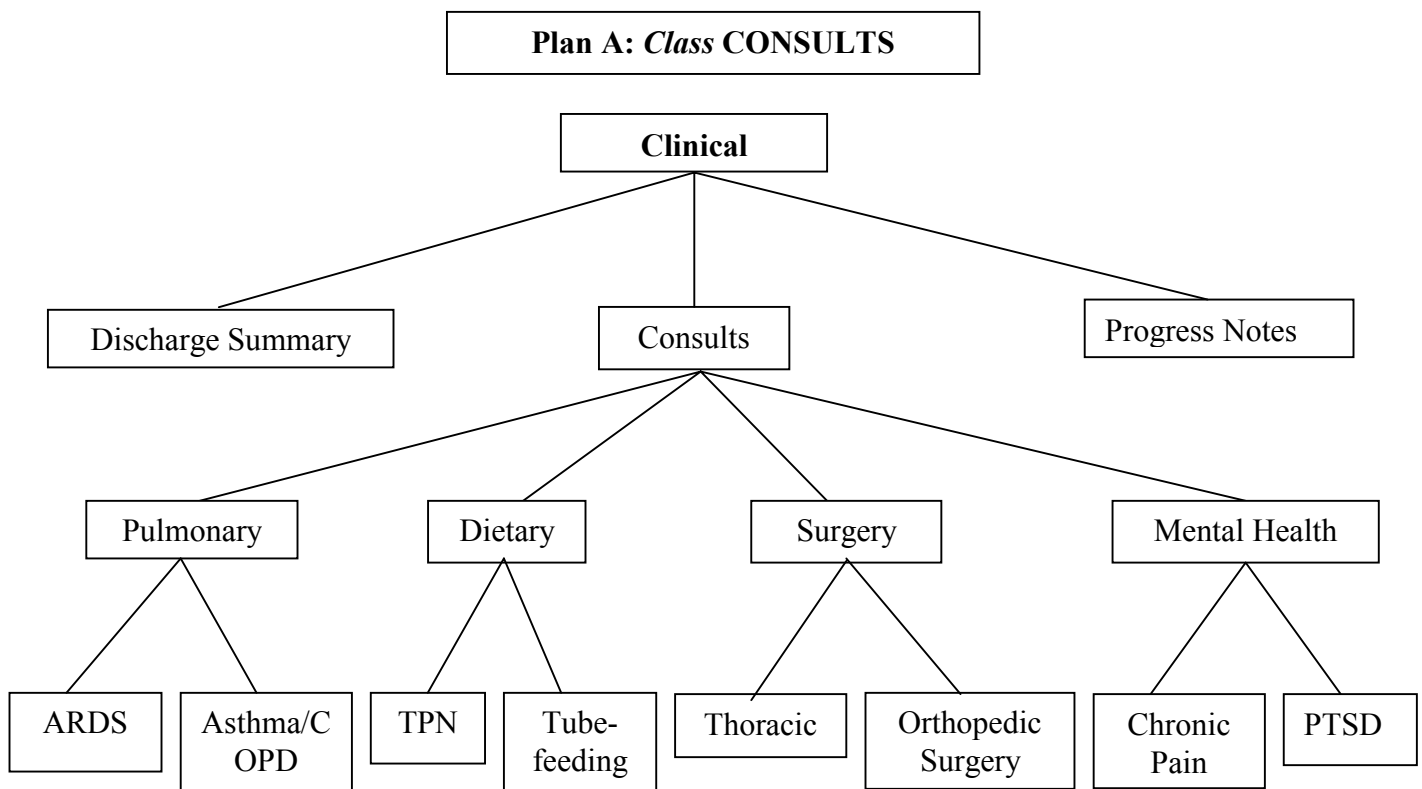
You should have TIU already set up on your system and be familiar with the *Text Integration Utilities (TIU) Implementation Guide*.

We present here two document hierarchies found useful by hospitals in the VHA system. Strategy A creates Consults as an independent class under Clinical Documents. Strategy B creates Consults as a document class under Progress Notes.

### Strategy A Advantages:

Provides a CLEAR separation of Consults from Progress Notes, and minimizes the number of choices for the end-user.

1. Simple, with few concerns for maintainability (e.g., no question as to whether heritable methods and properties of Progress Notes were appropriately overridden, etc.).



### Strategy A Disadvantages:

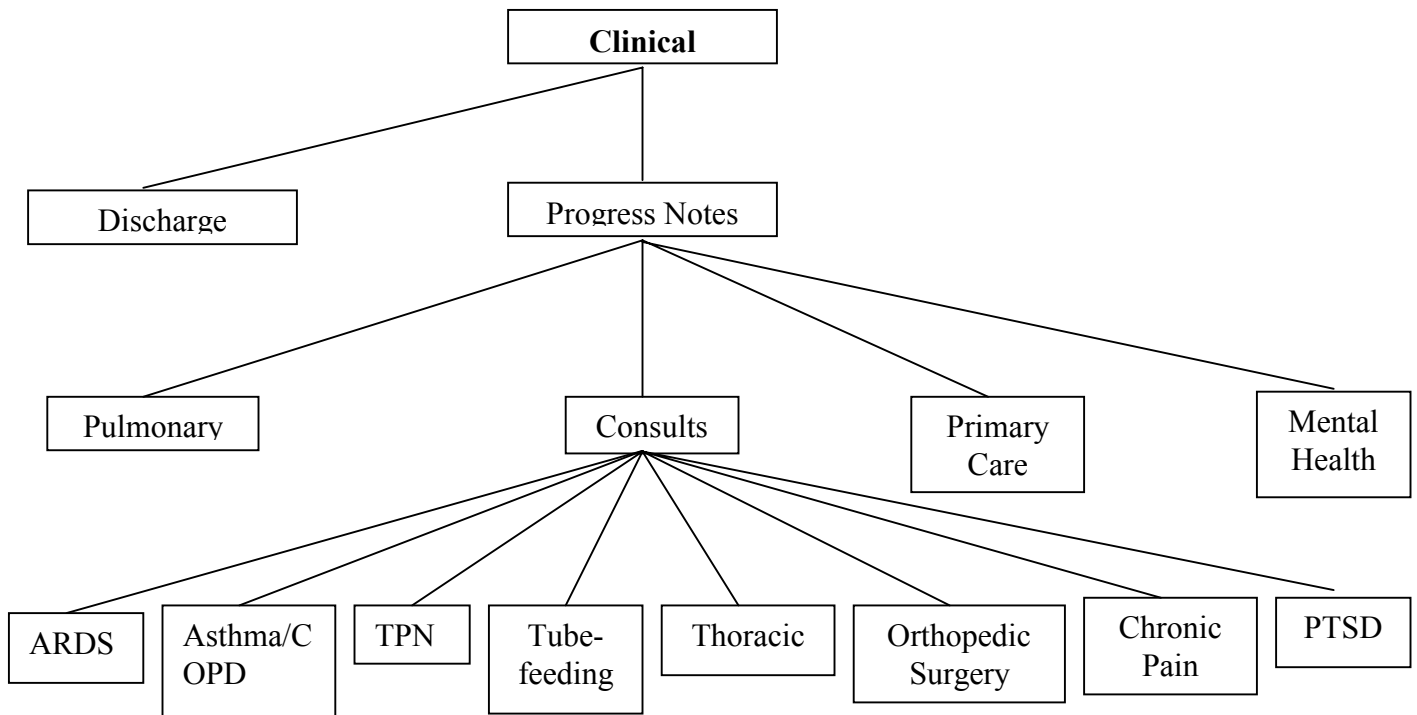
2. Not necessarily consistent with the way providers have been documenting their Consult Results in the past. (i.e., if they've been using PN titles to "result" consults, and referring to the notes on the SF 513's in the past, this will be a departure from that practice).

3. Limits flexibility of access to the information. (i.e., if set-up this way, they may only access the data through Integrated Document Management options on the TIU-side, and through the Consults tab of the CPRS chart).

**Strategy B Advantages:**

1. Consistent with the way many providers have been documenting their Consult Results in the past. (i.e., if they've been using PN titles to "result" consults, they may continue to do so, with the results showing up on both the 509 and SF 513).
2. Enhances flexibility of access to the information. (i.e., if set-up this way, they may access the data through any option on the TIU side, as well as through EITHER the Consults or Progress Notes tabs of the CPRS chart).

**Plan B: Document Class CONSULTS**



**Strategy B Disadvantages:**

1. Does NOT Provide a CLEAR separation of Consults from Progress Notes, and may offer too many choices for the end-user.
2. Complex, with some concerns for maintainability (e.g., if printing or filing appear incorrect, may result from heritable methods and properties of Progress Notes not being appropriately overridden, etc.).

You need to plan the set-up of the Document Definition Hierarchy in some detail, including the titles you want to use at your site, before proceeding with the TIU DEFINE CONSULTS option. The worksheet included in Appendix A of the *Text Integration Utilities (TIU) Implementation Guide* may prove useful in this process.

The option TIU DEFINE CONSULTS, exported with TIU\*1\*4, is used to select one or the other of these strategies and set them up at your hospital.

## TIU Setup Options

### TIU DEFINE CONSULTS

This option is exported with TIU\*1\*4. Once you have decided which Document Definition strategy to use, run the TIU DEFINE CONSULTS option. This option must be run before Consults may be completed using TIU documents.

In the following example we elect Plan B from the discussion on the preceding pages:

```
Select OPTION NAME: TIU DEFINE CONSULTS                Define CONSULTS for
TIU/CT Interface
Define CONSULTS for TIU/CT Interface

I'm going to create a new Document Definition for CONSULTS now.

GREAT! A new Document Definition has been created for CONSULTS.
Next, you need to decide whether you want CONSULTS to be set up
as a separate CLASS (comparable to DISCHARGE SUMMARY or PROGRESS
NOTES), or whether you want CONSULTS defined as a DOCUMENT CLASS
under PROGRESS NOTES. The benefits of each strategy are outlined
in the POST-INSTALLATION instructions for this patch.

NOTE: If you're not yet CERTAIN which strategy you want your site
to adopt, then quit here, and get consensus first (it's easier to
get permission than forgiveness, in this case)!

    Select one of the following:

            CL          Class
            DC          Document Class

Define CONSULTS as a CLASS or DOCUMENT CLASS: DC Document Class

Okay, you've indicated that you want to make CONSULTS a Document Class.

    Okay to continue? NO// YES

FANTASTIC! Your NEW DOCUMENT CLASS CONSULTS will now be added under
the PROGRESS NOTES Class...

Okay, I'm done...Please finish your implementation of CONSULTS by adding
any Titles as appropriate using the Create Document Definitions Option
under the TIUF DOCUMENT DEFINITION MGR Menu, as described in Step #3 of
the Post-Installation Instructions.

Press RETURN to continue...
```

## Create Document Definitions

After TIU DEFINE CONSULTS has been run, you need to enter the rest of the TIU hierarchy. You should have planned this out in detail according to instructions given in the *Text Integration Utility (TIU) Implementation Guide*. The Create Document Definitions option permits you to enter this hierarchy.

In the following example, a document title CARDIOLOGY CONSULT is added to the TIU document hierarchy:

```
Select OPTION NAME: TIU IRM MAINTENANCE MENU          TIU Maintenance Menu
menu

Select TIU Maintenance Menu Option: ?

    1      TIU Parameters Menu ...
    2      Document Definitions (Manager) ...
    3      User Class Management ...

Enter ?? for more options, ??? for brief descriptions, ?OPTION for help text.

Select TIU Maintenance Menu Option: 2  Document Definitions (Manager)

                --- Manager Document Definition Menu ---

Select Document Definitions (Manager) Option: ?

    1      Edit Document Definitions
    2      Sort Document Definitions
    3      Create Document Definitions
    4      Create Objects

Enter ?? for more options, ??? for brief descriptions, ?OPTION for help text.

Select Document Definitions (Manager) Option: 3  Create Document Definitions....
.....
```

(Continued on next page.)

Create Document Definitions		Jan 15, 1998 14:07:53	Page: 1 of 1
BASICS			
	Name		Type
1	CLINICAL DOCUMENTS		CL
2	DISCHARGE SUMMARY		CL
3	PROGRESS NOTES		CL
4	ADDENDUM		DC
5	OLD CONSULTS		CL
6	PHYSICAL THERAPY NOTES		CL
7	TEST CLASS		CL
8	TEST NOTES		CL
New Users, Please Enter '?NEW' for Help >>>			
	Class/DocumentClass	Next Level	Detailed Display/Edit
	(Title)	Restart	Status...
	(Component)	Boilerplate Text	Delete
Select Action: Next Level// <Enter> Next Level			

Select CLINICAL DOCUMENTS Item (Line 2-8): 3.....
---

Create Document Definitions		Jan 15, 1998 14:13:20	Page: 1 of 1
BASICS			
	Name		Type
1	CLINICAL DOCUMENTS		CL
2	PROGRESS NOTES		CL
3	ADVANCE DIRECTIVE		DC
4	ADVERSE REACTION/ALLERGY		DC
5	CRISIS NOTE		DC
6	CLINICAL WARNING		DC
7	HISTORICAL TITLES		DC
8	ADDICTION SEVERITY INDEX		DC
9	RAT NOTES		DC
10	TEST2 NOTES		DC
11	CONSULTS		DC
?Help >ScrollRight PS/PL PrintScrn/List +/- >>>			
	Class/DocumentClass	Next Level	Detailed Display/Edit
	(Title)	Restart	Status...
	(Component)	Boilerplate Text	Delete
Select Action: Next Level// <Enter> Next Level			

Select PROGRESS NOTES Item (Line 3-11): 11
--

(Continued on next page.)

Create Document Definitions		Jan 15, 1998 14:16:16	Page: 1 of 1
BASICS			
+	Name		Type
2	PROGRESS NOTES		CL
3	CONSULTS		DC
4	MEDICINE CONSULTS		TL
5	SURGERY CONSULTS		TL
6	NEUROLOGY CONSULTS		TL
7	PULMONARY CONSULTS		TL
?Help   >ScrollRight   PS/PL PrintScrn/List   +/-   >>>			
	(Class/DocumentClass)	Next Level	Detailed Display/Edit
	Title	Restart	Status...
	(Component)	Boilerplate Text	Delete
Select Action: Title//   <Enter>   Title			

Enter the Name of a new CONSULTS: **CARDIOLOGY CONSULTS**  
 CLASS OWNER: CLINICAL COORDINATOR Replace   <Enter>  
 STATUS: (A/I/T): INACTIVE// **A** ACTIVE  
 SEQUENCE: **8**  
 MENU TEXT: Cardiology Consults//

Entry Created

If you wish, you may enter another CONSULTS: <Enter>

Create Document Definitions		Jan 15, 1998 14:20:59	Page: 1 of 1
BASICS			
+	Name		Type
2	PROGRESS NOTES		CL
3	CONSULTS		DC
4	MEDICINE CONSULTS		TL
5	SURGERY CONSULTS		TL
6	NEUROLOGY CONSULTS		TL
7	PULMONARY CONSULTS		TL
8	CARDIOLOGY CONSULTS		TL
?Help   >ScrollRight   PS/PL PrintScrn/List   +/-   >>>			
	(Class/DocumentClass)	Next Level	Detailed Display/Edit
	Title	Restart	Status...
	(Component)	Boilerplate Text	Delete
Select Action: Title//			



## TIU Maintenance

### Correcting Misdirected Results

Occasionally a consult result is linked to the wrong consult. If this is detected prior to signature, it is possible for the author of a consult result to re-direct the record to a different consult request by any of several methods:

1. Through the Link to Request action, when processing the alert for the unsigned Consult Result.
2. Through the Individual Patient Document option .
3. You may choose the Link action from the All My Unsigned Documents Option.
4. From the CPRS Chart.

There are examples of the above four methods in the *Consult/Request Tracking User Manual*.

Following signature, such corrections can only be made by those persons who are granted permission to do so under the Authorization/ Subscription Utility (ASU). Information on how to make this kind of correction is shown here:

```

                                --- MIS Managers Menu ---

1      Individual Patient Document
2      Multiple Patient Documents
3      Print Document Menu ...
4      Search for Selected Documents
5      Statistical Reports ...

Select Text Integration Utilities (MIS Manager) Option: S
  1      Search for Selected Documents
  2      Statistical Reports
CHOOSE 1-2: 1  Search for Selected Documents

Select Status: UNVERIFIED// COM  completed

Select CLINICAL DOCUMENTS Type(s): Discharge Summaries// ALL
      Discharge Summaries  Progress Notes  Addendum  Consults

Select SEARCH CATEGORIES: AUTHOR// PAT  Patient
Select PATIENT:      WINCHESTER, CHARLES EMERSON III      01-01-67      107010167P
ACTIVE DUTY

                                A: Known allergies

Start Reference Date [Time]: T-7// (JAN 20, 1998)
Ending Reference Date [Time]: NOW// (JAN 27, 1998@14:20)

Searching for the documents.
```

(Continued on the next page.)

Clinical Documents		Jan 27, 1998 14:07:13	Page:	1 of 1
by PATIENT (WINCHESTER,CHARLES EMERSON III)		from 01/20/98 to	1 documents	
Patient	Document	Ref Date	Status	
1	WINCHESTER,C E(W0167)	PULMONARY CONSULT	01/26/98	completed

You must link your Result to a Consult Request...

The following CONSULT REQUEST(S) are available:

1> JAN 23, 1998@11:14 759 PULMONARY  
 2> JAN 23, 1998@11:14 760 PULMONARY  
 CHOOSE 1-2: 2 760

Refreshing the list.

Clinical Documents		Jan 27, 1998 14:07:13	Page:	1 of	1
by PATIENT (WINCHESTER,CHARLES EMERSON III)		from 01/20/98 to	1 documents		
Patient	Document	Ref Date	Status		
1	WINCHESTER,C E(W0167)	PULMONARY CONSULT	01/26/98	completed	
** Item 1 Reassigned. **					
>>>					
Find	Delete Document	Browse			
On Chart	Reassign	Print			
Edit	Link with Request	Change View			
Verify/Unverify	Send Back	Quit			
Amend Document	Detailed Display				
Select Action: Quit// <Enter>					





# Files

---

## \* Request/Consultation (#123)

This file contains consult and request orders originating primarily via the CPRS process. Once the order exists in this file, receiving service users perform update activities. An audit trail of the update activities is maintained in this file.

## \* Request Action Types (#123.1)

This file identifies the action types that may be used by a service to track activity related to a consult or request.

## \* Request Services (#123.5)

This file permits Services and Specialties to be grouped in a hierarchy representing the site's available services. This grouping capability may be used with Review screens to filter out consults to a service, sub service, specialty, or sub-specialty of consults/requests.

The main entry in this file is the "ALL SERVICES" entry. Other entries should be subordinate in the hierarchy.

The "ALL SERVICES" entry is used to display the hierarchy of the hospital services when the Clinician ordering the consult is prompted for "Select Service/Specialty:" to send the consult to.

## File Globals

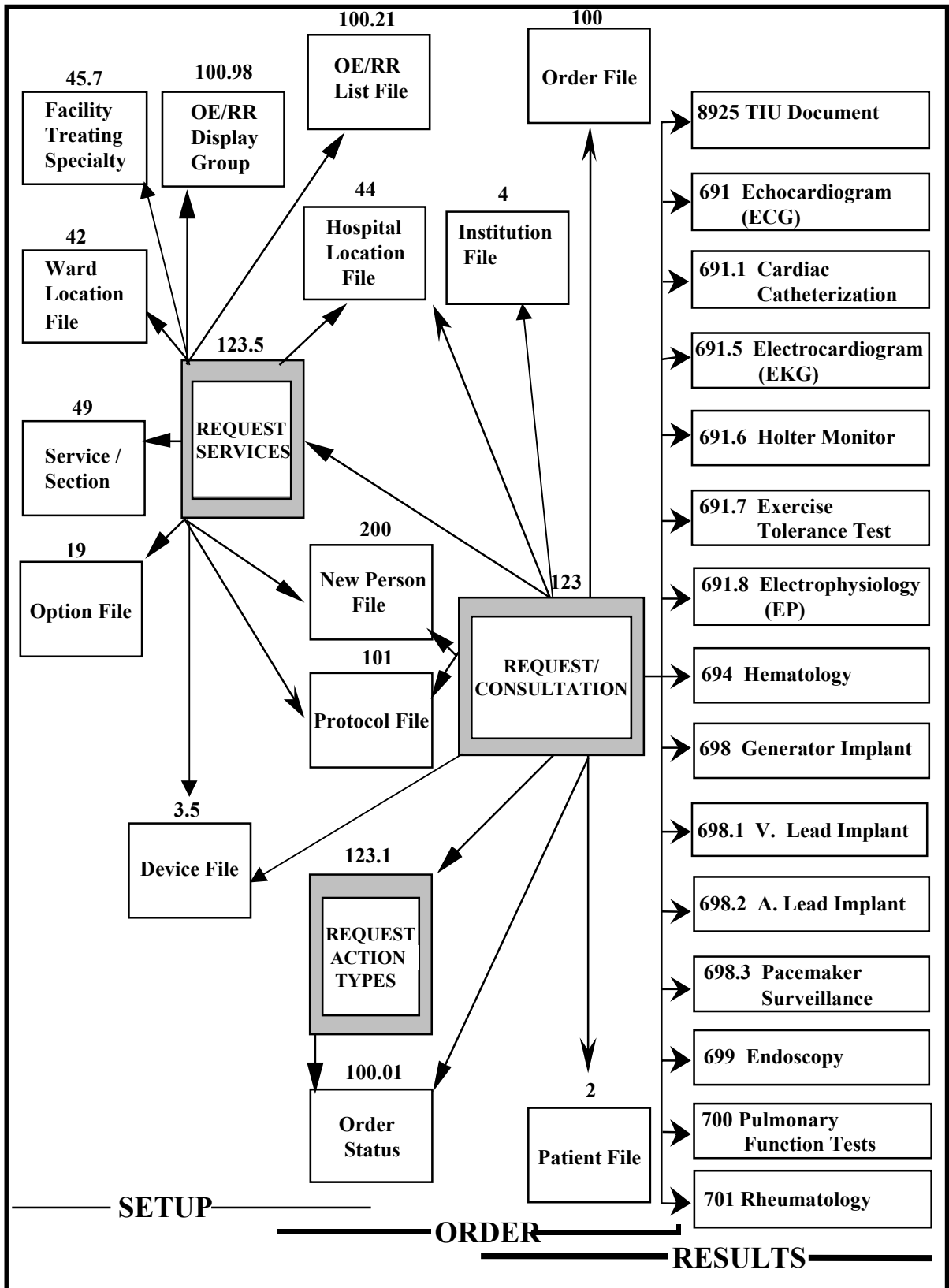
The following is a listing of the files contained in the Consults package. Listed for each file are its file number, name, global location, and an indicator as to whether or not data comes with the file.

Number	Name	Global	Data
123	REQUEST/CONSULTATION FILE	^GMR(123,	NO
123.1	REQUEST ACTION TYPES	^GMR(123.1	YES
123.5	REQUEST SERVICES	^GMR(123.5	YES

A file diagram of the above Consults package files and their relationship to other packages is shown on the following page.

# Consult/Request Tracking File Diagram

(Files in  are distributed with this package)



## **File Conversions**

During the install post-init, the following file conversions take place:

Protocols that are procedures are transferred from the Protocol file (#101) to the CPRS Orderable Items file (#101.43).

Services from the Request Services file (#123.5) are transferred to the CPRS Orderable Items File (#101.43).





## Exported Menus

---

There are five menus distributed with the Consults package. The GMRC MGR option is a composite of **all** Option file (#19) entries distributed in the GMRC namespace. The GMRC REPORTS is a composite of reports distributed with Consults. The GMRC GENERAL SERVICE USER, and GMRC PHARMACY USER contain the most frequently performed actions for their respective user types.

Option Name	Display Text
<b>GMRC MGR</b>	
GMRC REPORTS	Consults Tracking Reports
GMRC SETUP REQUEST SERVICES	Set up Consults Services
GMRC SETUP PROTOCOLS	Set up Consults Protocols
GMRC SERVICE USER MGMT	Service User Management
GMRC SERVICE TRACKING	Consults Service Tracking
GMRC PHARMACY TPN CONSULTS	Pharmacy TPN Consults
GMRC PRINT TEST PAGE	Print Test Page
GMRCSTSU	Group Update of Consults Requests
GMRC UPDATE AUTHORITY	Determine Users' Update Authority
GMRC USER NOTIFICATION	Determine if User is Notification Recipient
GMRC NOTIFICATION RECIPS	Determine Notification Recipients for a Service
GMRC TEST DEFAULT REASON	Test Default Reason for Request
GMRC LIST HIERARCHY	List Consult Service Hierarchy
GMRC DUPLICATE SUB-SERVICE	Duplicate Sub-Service

<b>Option Name</b>	<b>Display Text</b>
<b>GMRC REPORTS</b>	
GMRC COMPLETION STATISTICS	Completion Time Statistics
GMRC RPT PENDING CONSULTS	Service Consults Pending Resolution
GMRC RPT COMPLETE CONSULTS	Service Consults Completed
GMRC PROTOCOL LIST	List GMRC Protocols
GMRC RPT COMPLETE/PENDING	Service Consults Completed or Pending Resolution
GMRC RPT NUMBERED CONSULTS	Service Consults with Consults #s
GMRC RPT CONSULTS BY STATUS	Service Consults By Status
GMRC PROTOCOL DETAILED REPORT	Detailed Report of GMRC Protocols
GMRC PROTOCOL LIST	List GMRC Protocols
GMRC PRINT COMPLETION STAT	Print Completion Time Statistics Report
GMRC PRINT RPT NUMBERED	Print Service Consults by Status

<b>Option Name</b>	<b>Display Text</b>
<b>GMRC GENERAL SERVICE USER</b>	
GMRC SERVICE TRACKING	Consults Service Tracking
GMRC RPT PENDING	Service Consults Pending
GMRC COMPLETION STATISTICS	Completion Time Statistics

<b>Option Name</b>	<b>Display Text</b>
<b>GMRC PHARMACY USER</b>	
GMRC PHARMACY TPN CONSULTS	Pharmacy TPN Consults
GMRC RPT PENDING	Service Consults Pending
GMRC COMPLETION STATISTICS	Completion Time Statistics

It should be noted that the following options:

GMRC PHARMACY TPN CONSULTS

GMRC SERVICE TRACKING

are options which utilize review screens and “Select Action:” capabilities similar to CPRS review screen protocol menus. These three options should be distributed to the appropriate users, based on the “Menu/Option Access” recommendations found in the Package Security section of this manual.

In addition to the Option file (#19) menu, the Protocol file (#101) has several protocol menus distributed in the GMRC namespace. These menus are not for distribution to

## Cross-References

users. These menus represent the set of responses permitted at specific prompts during Consults processing.

The following is a list of exported protocol menus by their GMRC prefix.

GMRCACTM protocol menus are used by Consults at “Select Action:” prompts. See the Package Security section of this manual for a discussion on how GMRCACTM protocol menus are used to provide **by Service** security at the “Select Action” prompts.

GMRCACTM PHARMACY PKG MENU	Pharmacy/TPN Interface Menu
GMRCACTM SERVICE ACTION MENU	Service Action Menu
GMRCACTM USER REVIEW MENU	Consults Review

GMRCPLACEM protocol menus are used to provide the acceptable responses for “Place of Consultation:” prompts. If the consult/request is being ordered on an inpatient basis GMRCPLACEM - INPATIENT is used at this prompt, otherwise, GMRCPLACEM - OUTPATIENT is used.

GMRCPLACEM - INPATIENT	Inpatient Place of Consultation
------------------------	---------------------------------

GMRCPLACEM - OUTPATIENT	Outpatient Place of Consultation
-------------------------	----------------------------------

GMRCRM REQUEST TYPES is maintained by the IRMS Service to represent all procedures, tests, etc., which may be ordered as direct orders, not as consultations. The “Set up Consults Procedure” section of this manual may be used to create procedure request items and automatically add them to this protocol menu.

GMRCURGENCYM protocol menus are used to provide the acceptable responses for “Urgency” prompts. If an outpatient consult or request is being ordered, GMRCURGENCYM - OUTPATIENT is used. If the order is an inpatient consult request, GMRCURGENCYM CSLT - INPATIENT is used. If the order is an inpatient procedure request, GMRCURGENCYM REQ - INPATIENT is used.

GMRCURGENCYM - OUTPATIENT	Outpatient Urgency
GMRCURGENCYM CSLT - INPATIENT	Consult Inpatient Urgency
GMRCURGENCYM REQ - INPATIENT	Request Inpatient Urgency





## Cross-References

---

The Consults files contain the following cross-references:

Request/Consultation file (#123)

AC            ^GMR(123, "AC", OE/RR FILE NUMBER, DA)

This cross-reference permits determination of the request entry in this file based on the ORIFN (pointer to File 100) from CPRS.

AD            ^GMR(123, "AD", Patient, Inverted Date of Request, DA)

This is the primary cross-reference used by Consults to display consults/requests for a patient, with the most recent Date of Request first.

AD1          ^GMR(123, "AD1", Date of Request, DA)

AE            ^GMR(123, "AE", To Service, CPRS Status, Inverted Date of Request, DA)

This cross-reference is used to display consults/requests for a particular service and CPRS status, with the most recent Date of Request first.

AE1          ^GMR(123, "AE1", Date of Request, DA)

AE2          ^GMR(123, "AE2", CPRS Status, DA)

B            ^GMR(123, "B", File Entry Date, DA)

The "B" Cross-reference is the regular cross-reference for this file.

C            ^GMR(123, "C", TO Service, DA)

The "C" cross-reference enables VA FileMan look-up of information based on the TO Service.

D            ^GMR(123, "D", CPRS Status, DA)

The “D” cross-reference enables VA FileMan lookup of information based on the CPRS status.

E ^GMR(123, “E”, Date of Request, DA)

The “E” cross-reference enables VA FileMan lookup of information based on the Date of Request.

F ^GMR(123, "F", Patient, DA )

The “F” cross-reference enables VA FileMan lookup of information based on the Patient Name.

G ^GMR(123,"G",sending provider,DA)

The “G” cross-reference allows look-up of consults by sending provider.

H ^GMR(123,"H",requesting location,DA)

The “H” cross-reference allows look-up of consults by the requesting location.

$$R \stackrel{\text{GMR}}{\sim} (123, "R", \text{associated result}, DA)$$

The “R” cross-reference allows look-up of consults based on the results associated with them.

## Request Action Types file (#123.1

AC ^GMR(123.1, "AC", CPRS Status, DA)

This cross-reference is used when the call to RESULT^GMRCR returns a CPRS status. This CPRS status is used to determine the action type to use to update activity tracking.

B ^GMR(123.1, "B", Action Type, DA)

The “B” cross-reference is the regular cross-reference for this file.

C ^GMRC(123.1, "C", Related Action Protocol, DA)

This cross-reference is used to associate the action type with the protocol selected from the “Select Action:” prompt. The action type internal number is then used to set the variable GMRCA for audit trail processing.



Request Services file (#123.5)

B                    ^GMR(123.5, "B", Service Name, DA)

The "B" cross-reference is the regular cross-reference for this file, permitting lookup by Service Name.

C                    ^GMR(123.5, "C", Related Treating Specialty, DA)

The "C" cross-reference enables VA FileMan lookup of information, based on the RELATED TREATING SPECIALTY. (Note: This field exists, but is not currently used by the package.)

D                    ^GMR(123.5, "D", Synonym, DA)

The "D" cross-reference permits SYNONYMS to be used to find the Service to send a consult/request to.







## Archiving and Purging

---

No archiving or purging utilities are provided in this version for the Consults distributed files.









## External Relations

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The Consults package is dependent upon other VA software to function correctly.

<b>PACKAGE</b>	<b>VERSION</b>	<b>NOTES</b>
VA FileMan	21	
OE/RR	3.0	
KERNEL	8.0 (+ Patches)	“Select Action:”prompts, and Alert capabilities
PIMS	5.3	Calls to VADPT

## Private DBIA Agreements

DBA Number	Custodial Package
147	Medicine
165	OE/RR
167	Kernel
169	Kernel
181	OE/RR
510	VA FileMan
615	Medicine
616	Medicine
627	OE/RR
628	OE/RR
629	OE/RR
630	OE/RR
631	OE/RR
632	Kernel
635	OE/RR
636	OE/RR
637	OE/RR
638	OE/RR
639	OE/RR
640	OE/RR
861	OE/RR
862	OE/RR
863	OE/RR
864	OE/RR
865	OE/RR
866	OE/RR
867	OE/RR
868	OE/RR
869	OE/RR
870	OE/RR
871	OE/RR
872	OE/RR
873	OE/RR
875	OE/RR
2038	OE/RR

## Internal Relations

---

All options are independently evocable.

### **Package-Wide Variables**

There are no package-wide variables exported with this package, that require SACC exemption.



# Package Interface

## HL7 Fields

The following is a list of HL7 fields that are used in transactions between OE/RR V. 3.0 and the Consult package. Not every field will be used in every message.

SEG	SEQ	FIELD NAME	EXAMPLE	HL7 TYPE
MSH	1	Field Separator		string
	2	Encoding Characters	^~\&	string
	3	Sending Application	ORDER ENTRY	string
	4	Sending Facility	660	string
	9	Message Type	ORM	ID
PID	3	Patient ID	5340747	composite ID
	5	Patient Name	Doe,John H	patient name
PV1	2	Patient Class	I	table 4
	3	Patient Location	32^234-4	user table
	19	Visit Number	1241243	composite ID
{ ORC	1	Order Control	NW	table 119
	2	Placer Order Number	234123;1^OR	number^application
	3	Filler Order Number	870745^GMRC	number^application
	5	Order Status	IP	table 38
	7	Quantity/Timing	^^^^R	^^^^priority coded per HL7 4.4
	9	Date/Time of Transaction	199404141425	timestamp
	10	Entered By	1166	composite ID
	12	Ordering Provider	1270	composite ID
	15	Order Effective D/T	199404141430	timestamp
	16	Order Control Reason	S^Service Correction^99ORN^^	coded element
NTE	1	Set ID	16	set ID
	2	Source of Comment	L	table 105
	3	Comment	Cancelled by Service	formatted text
OBR	4	Universal Service ID	^^^58^Cardiology^99CON	coded element
	18	Placer Field 1 (used for place of consultation)	B	string

	19	Placer Field 2 (used for attention)	1044	string
	22	Results Rpt/Status Change - Date/Time	199404150635	timestamp
	25	Result Status	F	table 123
	32	Principle Result Interpreter	1345	composite ID
ZSV	1	Request Service ID	^^^12^Psychiatry^99CON	coded element
	2	Consult Type	Family Counseling	string
{ OBX }	1	Set ID	1	number
	2	Value Type	TX	table 125
	3	Observation ID	2000.02^Reason for Request^AS4	coded element
	4	Observation Sub-ID	1	string
	5	Observation Value	r/o TB	string
}	8	Abnormal Flag	N	table 78

**Notes:**

*Sending Application* is the name of the DHCP package generating the message; *Sending Facility* is the station number.

*Patient ID* is patient DFN (pointer to file 2)

*Patient Location*, for an inpatient, is Hospital Location IEN^Room-Bed. For and outpatient, it is the Hospital Location IEN. In both cases it is the location from which the order is being placed.

*Visit Number* is the IEN of the visit in the Visit file.

*Placer Order Number* is the OE/RR order number.

*Filler Order Number* is the Consult order number.

*Order Status* is needed when Consults releases an order; possible values from HL7 table 38 include:

DC=Discontinued	SC=Active	A=Partial Results
CM=Completed	ZC=Scheduled	CA=Cancelled (Denied)
IP=Pending		RP=DC'd due to Edit

*Quantity/Timing* will contain only the urgency in the sixth ^-piece, whose possible values include:

S=Stat	Z24=Within 24 hours	ZW=Within 1 week
R=Routine	Z48=Within 48 hours	ZM=Within 1 month
ZT=Today	Z72=Within 72 hours	ZNA=Next available
ZE=Emergency		

*Entered By* and *Ordering Provider* are IENs in the New Person file.

*Universal Service ID* is a national code in the first part. The alternate code is a pointer to either the Request Services or Procedures file.

*Placer Field 1* will contain the place of consultation, as a set of codes. Possible values include:

B=Bedside  
E=Emergency Room  
OC=Consultant's choice

*Placer Field 2* will contain the IEN in the New Person file of the user to whom this consult should be directed.

*The OBX segment* is used to transmit related data about the patient when placing a consult request; possible observation ID's include:

Reason for Request (AS4 2000.02) = text  
Provisional Diagnosis (not coded) = text  
Provisional Diagnosis (coded element) = ICD ^ text

*The Observation ID* is used for ordering OBX segments.



## Order Event Messages

The following tables identify the HL7 fields that are passed in each kind of event associated with OE/RR. For each event there is an order control code and a set of fields listed. For any given event, however, some of the fields may be empty (observation sub-id, for example).

The protocols identified in the tables use OE/RR namespacing conventions. The messages sent by OE/RR will use the OR namespaced protocols indicated. Individual packages may use whatever protocol names they wish.

### Front Door – Consults

Action	Request from OE/RR	Consults accepts	Consults rejects
Protocol	OR EVSEND GMRC	GMRC EVSEND OR	GMRC EVSEND OR
Order Control	NW (new order)	OK (accepted)	OC (canceled)
HL7 Fields	MSH: 1,2,3,4,9 PID: 3,5 PV1: 2,3,19 ORC: 1,2,7,10,12,15 OBR: 4,18,19 OBX: 1,2,3,5	MSH: 1,2,3,4,9 PID: 3,5 ORC: 1,2,3	MSH: 1,2,3,4,9 PID: 3,5 ORC: 1,2,3,12,15,16 OBR: 4
Protocol	OR EVSEND GMRC	GMRC EVSEND OR	GMRC EVSEND OR
Order Control	CA (cancel) DC (discontinue) HD (hold) RL (release)	CR (canceled) DR (discontinued) HR (held) OR (released)	UC (unable to cancel) UD (unable to dc) UH (unable to hold) OC (order canceled)
HL7 Fields	MSH: 1,2,3,4,9 PID: 3,5 ORC: 1,2,3,10,12,15,16	MSH: 1,2,3,4,9 PID: 3,5 ORC: 1,2,3,5	MSH: 1,2,3,4,9 PID: 3,5 ORC: 1,2,3,16

Example: Pulmonary Consult at bedside to rule out pneumonia

New Order

```

Array: MSG(1)="MSH|^~\&|ORDER ENTRY|660|||ORM"
        MSG(2)="PID||270|CUMQUAT,EARNEST Q."
        MSG(3)="PV1|I|12^4101-B|||||10185"
        SG(4)="ORC|NW|934;1^OR|||||^R||10|6||199409151430"
        MSG(5)="OBR|||^25^99CON|||||B|1044"
        MSG(6)="OBX|1|TX|2000.02^Reason for Request^AS4|1|R/o pneumonia"
        MSG(7)="OBX|2|TX|^Provisional Diagnosis|1|Viral infection"
Call: D MSG^XQOR("OR EVSEND GMRC",.MSG) ; New order from OE/RR
Array: MSG(1)="MSH|^~\&|CONSULTS|660|||ORR"
        MSG(2)="PID||270|CUMQUAT,EARNEST Q."
        MSG(3)="ORC|OK|934;1^OR|233445^GMRC"
Call: D MSG^XQOR("GMRC EVSEND OR",.MSG) ; Consults accepts, returns order #

```

Hold an Order

```

Array: MSG(1)="MSH|^~\&|ORDER ENTRY|660|||ORM"
        MSG(2)="PID||270|CUMQUAT,EARNEST Q."
        MSG(3)="ORC|HD|92234;2^OR|233445^GMRC|||||10|6||199409151430"
Call: D MSG^XQOR("OR EVSEND GMRC",.MSG) ; OE/RR requests holding order
        MSG(2)="PID||270|CUMQUAT,EARNEST Q."
        MSG(3)="ORC|HR|92234;2^OR|233445^GMRC"
Call: D MSG^XQOR("GMRC EVSEND OR",.MSG) ; Consults holds order

```

Discontinue an Order

```

Array: MSG(1)="MSH|^~\&|ORDER ENTRY|660|||ORM"
        MSG(2)="PID||270|CUMQUAT,EARNEST Q."
        MSG(3)="ORC|DC|92234;3^OR|233445^GMRC|||||10|6||199409151430"
Call: D MSG^XQOR("OR EVSEND GMRC",.MSG) ; OE/RR requests discontinuing order
Array: MSG(1)="MSH|^~\&|CONSULTS|660|||ORR"
        MSG(2)="PID||270|CUMQUAT,EARNEST Q."
        MSG(3)="ORC|DR|92234;3^OR|233445^GMRC"
Call: D MSG^XQOR("GMRC EVSEND OR",.MSG) ; Consults discontinues order

```

Example: EKG at bedside

New Order

```

Array: MSG(1)="MSH|^~\&|ORDER ENTRY|660|||ORM"
        MSG(2)="PID||270|CUMQUAT,EARNEST Q."
        MSG(3)="PV1|I|12^4101-B|||||10185"
        MSG(4)="ORC|NW|935;1^OR|||||^R||10|6||199409151430"
        MSG(5)="OBR|||^2553^99PRO|||||B|1044"
        MSG(6)="OBX|1|TX|2000.02^Reason for Request^AS4|1|Monitoring progress"
Call: D MSG^XQOR("OR EVSEND GMRC",.MSG) ; New order from OE/RR
Array: MSG(1)="MSH|^~\&|CONSULTS|660|||ORR"
        MSG(2)="PID||270|CUMQUAT,EARNEST Q."
        MSG(3)="ORC|OK|935;1^OR|233446^GMRC"
Call: D MSG^XQOR("GMRC EVSEND OR",.MSG) ; Consults accepts, returns order #

```

Example: Family Counseling consult

*New Order*

```
Array:      MSG(1)="MSH|^~\&|ORDER ENTRY|660||| |ORM"  
            MSG(2)="PID|||270|CUMQUAT,EARNEST Q."  
            MSG(3)="PV1|I|12^4101-B||||||| | | | | |"  
            MSG(4)="ORC NW|936;1^OR| | | | |R|199409151425|10||6||199409151430"  
            MSG(5)="OBR |||^15^PSYCHIATRY^99CON| | | | | | | | |OC|1044"  
            MSG(6)="ZSV|^15^PSYCHIATRY^99CON|Family Counseling"  
            MSG(7)="OBX|1|TX|2000.02^Reason for Request^AS4|1|"  
Call:      D MSG^XQOR("OR EVSEND GMRC",.MSG)           ; New order from OE/RR  
  
Array:      MSG(1)="MSH|^~\&|CONSULTS|660||| |ORR"  
            MSG(2)="PID|||270|CUMQUAT,EARNEST Q."  
            MSG(3)="ORC OK|936;1^OR|233447^GMRC"  
Call:      D MSG^XQOR("GMRC EVSEND OR",.MSG); Consults accepts, returns order #
```

## Back Door Consults

Back door orders are handled by sending OE/RR the ORM message for a Consult order with a 'send number' order control code. This permits OE/RR to store the order in its database and return the OE/RR order number to consults with a 'number assigned' order control code. OE/RR cannot actually reject Consult events. The 'data errors' order control code is just used as some way to communicate to Consults that OE/RR could not interpret the ORM message. This should generally not happen. Use of the 'back door' by packages for ordering is optional. It is still necessary to post an event when results are available.

### Back Door – Consults

Action	Event from Consults	OE/RR accepts	OE/RR rejects
Protocol	GMRC EVSEND OR	OR EVSEND GMRC	OR EVSEND GMRC
Order Control	SN (send number)	NA (number assigned)	DE (data errors)
HL7 Fields	MSH: 1,2,3,4,9 PID: 3,5 PV1: 2,3,19 ORC: 1,3,7,10,12,15 OBR: 4,18,19 OBX: 1,2,3,4,5	MSH: 1,2,3,4,9 PID: 3,5 ORC: 1,2,3	MSH: 1,2,3,4,9 PID: 3,5 ORC: 1,3,16
Protocol	GMRC EVSEND OR		OR EVSEND GMRC
Order Control	OC (cancel) OD (discontinue) OH (hold) RL (release)	There is no return event. OE/RR must accept the instruction from Consults.	DE (data errors)
HL7 Fields	MSH: 1,2,3,4,9 PID: 3,5 ORC: 1,2,3,12,15,16 OBR: 4		MSH: 1,2,3,4,9 PID: 3,5 ORC: 1,2,3,16
Protocol	GMRC EVSEND OR		OR EVSEND GMRC
Order Control	SC (accepted)		DE (data errors)

Action	Event from Consults	OE/RR accepts	OE/RR rejects
HL7 Fields	MSH: 1,2,3,4,9 PID: 3,5 ORC: 1,2,3,5,12,15 OBR: 4	There is no return event. OE/RR must accept the instruction from Consults.	MSH: 1,2,3,4,9 PID: 3,5 ORC: 1,2,3,16
Protocol	GMRC EVSEND OR		OR EVSEND GMRC
Order Control	XX (forwarded)		DE (data errors)
HL7 Fields	MSH: 1,2,3,4,9 PID: 3,5 ORC: 1,2,3,7,10,12,15 OBX: 1,2,3,4,5	There is no return event. OE/RR must accept the instruction from Consults.	MSH: 1,2,3,4,9 PID: 3,5 ORC: 1,2,3,16
Protocol	GMRC EVSEND OR		OR EVSEND GMRC
Order Control	RE (completed)		DE (data errors)
HL7 Fields	MSH: 1,2,3,4,9 PID: 3,5 ORC: 1,2,3,12,15 OBR: 4,7,22,25,32 OBX: 1,2,3,4,5,8	There is no return event. OE/RR must accept the instruction from Consults.	MSH: 1,2,3,4,9 PID: 3,5 ORC: 1,2,3,16

Example: Pulmonary consult at bedside to rule out pneumonia

```
New Order
Array:  MSG(1)="MSH|^~\&|CONSULTS|660|||ORM"
        MSG(2)="PID||270|CUMQUAT,EARNEST Q."
        MSG(3)="PV1|I|1D^4101-B|||10185"
        MSG(4)="ORC|SN|233445^GMRC|^R||10|6|199409151430"
        MSG(5)="OBR|||^25^99CON|||B|1044"
        MSG(6)="OBX|1|TX|2000.02^Reason for Request^AS4|1|R/o pneumonia"
Call:   D MSG^XQOR("GMRC EVSEND OR",.MSG) ; New order from Consults

Array:  MSG(1)="MSH|^~\&|ORDER ENTRY|660|||ORR"
        MSG(2)="PID||270|CUMQUAT,EARNEST Q."
        MSG(3)="ORC|NA|92234^OR|234455^GMRC"
Call:   D MSG^XQOR("OR EVSEND GMRC",.MSG) ; OE/RR returns order number

Discontinue an Order
Array:  MSG(1)="MSH|^~\&|CONSULTS|660|||ORM"
        MSG(2)="PID||270|CUMQUAT,EARNEST Q."
        MSG(3)="ORC|OD|92234^OR|234455^GMRC|^Denied by service"
Call:   D MSG^XQOR("GMRC EVSEND OR",.MSG) ; Consults discontinued order

Service Accepted the Order
Array:  MSG(1)="MSH|^~\&|CONSULTS|660|||ORM"
        MSG(2)="PID||270|CUMQUAT,EARNEST Q."
        MSG(3)="ORC|SC|92234^OR|234455^GMRC"
        MSG(4)="OBR|||^25^99CON"
Call:   D MSG^XQOR("GMRC EVSEND OR",.MSG) ; Consults accepted order

Completed Order
Array:  MSG(1)="MSH|^~\&|CONSULTS|660|||ORU"
        MSG(2)="PID||270|CUMQUAT,EARNEST Q."
        MSG(3)="ORC|RE|92234^OR|234455^GMRC"
        MSG(4)="OBR|||^25^99CON||199409160810|||199409160910||F||455"
        MSG(5)="OBX|1|TX|^25^99CON|Pneumonia|A"
Call:   D MSG^XQOR("GMRC EVSEND OR",.MSG) ; Consults completed order
```

## Orderable Item Updates

When Consults makes request services available for ordering, OE/RR needs to be notified. This is done via a protocol event point which should be defined by Consults. When this event point is invoked, an HL7 master file update message is sent. Information that should be available in this segment is listed in the following table.

SEG	SEQ	FIELD NAME	EXAMPLE	HL7 TYPE
MSH	1	Field Separator		string
	2	Encoding Characters	^~\&	string
	3	Sending Application	CONSULTS	string
	4	Sending Facility	660	string
	9	Message Type	MFN	ID
MFI	1	Master File ID	123.5^Request Services^99DD	coded element
	3	File-Level Event Code	REP	table 178
	6	Response Level Code	NE	table 179
{ MFE	1	Record-Level Event Code	MAD	table 180
	4	Primary Key	^^^25^Cardiology Consult^99CON	coded element
ZCS	1	Service Usage	2	coded value (1=Grouper only, 2=Tracking only)
{ ZSY }	1	Set ID	1	Numeric
}	2	Synonym	CARD	string

### Notes:

When doing the initial population of the orderable items file, the File Level Event Code should be REP. After the initial population, subsequent changes should have the UPD code.

Orderable item updates always originate from Consults.

There may be multiple MFE segments passed in a single transaction.

The record-level event code tells whether this transaction is an update, addition, inactivation, etc.

The primary key is the coded element that is normally passed when creating an order. By using the coded element, we can know the national and local names for a consult.

## Example:

Adding new request services

```
Array:      MSG(1)="MSH|^~\&|CONSULTS|660|||MFN"  
           MSG(2)="MFI|123.5^Request Services^99DD||REP||NE"  
           MSG(3)="MFE|MAD|||^^^4^CARDIOLOGY^99CON"  
           MSG(4)="ZCS|2"  
Call:      D MSG^XQOR("GMRC ORDERABLE ITEM UPDATE",.MSG)
```

Inactivating a request service

```
Array:      MSG(1)="MSH|^~\&|CONSULTS|660|||MFN"  
           MSG(2)="MFI|123.5^Request Services^99DD||UPD||NE"  
           MSG(3)="MFE|MDC|||^^^2^MEDICINE^99CON"  
Call:      D MSG^XQOR("GMRC ORDERABLE ITEM UPDATE",.MSG)
```



## Orderable Item Updates

When Consults makes procedures available for ordering or inactivates a procedure, OE/RR needs to be notified. This is done via a protocol event point which should be defined by Consults. When this event point is invoked, an HL7 master file update message is sent. Information that should be available in this segment is listed in the following table.

SEG	SEQ	FIELD NAME	EXAMPLE	HL7 TYPE
MSH	1	Field Separator		string
	2	Encoding Characters	^~\&	string
	3	Sending Application	PROCEDURES	string
	4	Sending Facility	660	string
	9	Message Type	MFN	ID
MFI	1	Master File ID	123.3^Procedures^99DD	coded element
	3	File-Level Event Code	REP	table 178
	6	Response Level Code	NE	table 179
{ MFE	1	Record-Level Event Code	MAD	table 180
	4	Primary Key	^^^1225^Electrocardiogram^99PRC	coded element
{ ZSY}	1	Set ID	1	numeric
}	2	Synonym	EKG	string

### Notes:

When doing the initial population of the orderable items file, the File Level Event Code should be REP. After the initial population, subsequent changes should have the UPD code.

Orderable item updates always originate from Consults.

There may be multiple MFE segments passed in a single transaction.

The record-level event code tells whether this transaction is an update, addition, inactivation, etc.

The primary key is the coded element that is normally passed when creating an order. By using the coded element, we can know the national and local names for a procedure.

### Example:

Adding new procedures

```
Array:      MSG(1)="MSH|^~\&|PROCEDURES|660|||MFN"
              MSG(2)="MFI|101^Protocol^99DD|REP||NE"
              MSG(3)="MFE|MAD||^1688^Atrial Lead Implant^99PRO"
              MSG(4)="ZSY|1|A-L Imp"
              MSG(5)="MFE|MAD||^1705^Bone Marrow Aspirate^99PRO"
Call:      D MSG^XQOR("GMRC ORDERABLE ITEM UPDATE",.MSG)
```

Inactivating a procedure

```
Array:      MSG(1)="MSH|^~\&|PROCEDURES|660|||MFN"
              MSG(2)="MFI|101^Protocol^99DD|UPD||NE"
              MSG(3)="MFE|MDC||^1705^Bone Marrow Aspirate^99PRO"
Call:      D MSG^XQOR("GMRC ORDERABLE ITEM UPDATE",.MSG)
```

## Ordering Parameters

There are no Consult ordering parameters identified at this time.

## Procedure Calls

We need entry points defined in the Consults package that will handle the following procedure calls. It is up to the developers exactly how entry points are defined and named. Note that to behave properly in a windowed environment, all variables used in the calls must be NEWed properly. The calls must also be silent (no reads or writes).

### Return Consult/Procedure List

OER^GMRCSLM1 (DFN, SERV, BEG, END, STS)

passed:       DFN: Patient DFN  
              SERV: Request service IEN  
              BEG: Beginning date  
              END: Ending date  
              STS: Order status IEN

returned:     ^TMP("GMRCR",\$J,"CS",#,0) = IEN^request date^order status^  
  service^procedure name or consult

### Return Narrative of Report

DT^GMRCSLM2 (IEN)

passed:       IEN: IEN of request in Request/Consultation file #123  
returned:     ^TMP("GMRCR",\$J,"DT",#,0) = line of report text

### Return Results Report

RT^GMRCGUIA (IEN, ARRAY)

passed:       IEN: IEN of request in Request/Consultation file #123  
              ARRAY: name of array to return report text  
returned:     @ARRAY@(#,0) = line of report text

Return List of Services the Current User may Order From

SERV1^GMRCASV

passed:       GMRCTO: 1  
              GMRCDG: 1

returned:     ^TMP("GMRCSLIST",\$J,#) = IEN^service name^grouper IEN^+^usage  
  where + indicates a grouper with members following,  
  and Usage is 1 if Grouper Only or 2 if Tracker Only

### Return List of Services for a Procedure

GETSVC^GMRCPRO (.ARRAY, ID)

passed:       ARRAY: array to return list of services  
              ID: procedure identifier, in HL7 format `IEN;99PRC'  
returned:     ARRAY=number of services in list  
              ARRAY(#) = IEN ^ name of service

**Return Default Reason for Request**

GETDEF^GMRCDRFR (ARRAY, SERV, DFN, RESLV)

passed:       ARRAY: name of array to return default text

              SERV: IEN of Request Service in file #123.5

              DFN: Patient DFN [optional]

              RESLV: 1 or 0, if embedded TIU objects are to be resolved

returned:     @ARRAY@(#,0) = line of text

**Return Allowable Editing Flag for Reason**

\$\$REAF^GMRCDRFR (IEN)

passed:       SERV: IEN of Request Service in file #123.5

returned:     0 if unrestricted, 1 for Edit only, or 2 if no editing allowed

Return Provisional Diagnosis requirements

\$\$PROVDX^GMRCUTL1 (SERV)

passed:       SERV: IEN of Request Service in file #123.5

returned:     A^B: A = O (optional), R (required), or S (suppress)

              B = F (free text) or L (Lexicon entry)

# How to Generate On-Line Documentation

---

## Routines

The namespace for the Consults package is GMRC. A listing/printout of any or all of the Consults routines can be produced by using the Kernel option XUPRROU (List Routines). This option is found on the XUPROG (Programmer Options) menu, which is a sub-menu of the EVE (Systems Manager Menu) option. When prompted with “routine(s) ? >:” type in GMRC\* to get a listing of all Consults routines.

The first line of each routine contains a brief description of the general function of the routine. A listing of just the first line of each Consults routine can be produced by using the Kernel option XU FIRST LINE PRINT (First Line Routine Print). This option is found on the XUPROG (Programmer Options) menu, which is a sub-menu of the EVE (Systems Manager Menu) option.

## Globals

The globals used in the Consults package are ^GMR(123, ^GMR(123.1, and ^GMR(123.5. A listing/printout of any of these globals can be produced by using the Kernel option XUPRGL (List Global). This option is found on the XUPROG (Programmer Options) menu, which is a sub-menu of the EVE (Systems Manager Menu) option.

## Files

The number-space for Consults files is 123. A listing of these files can be obtained by using the VA FileMan option DILIST (List File Attributes). Depending on the FileMan template used to print the listing, this option will print out all or part of the data dictionary for the Consults files.

## Menu/Options

The menu and options exported by the Consults package all begin with the GMRC namespace. Individual options can be viewed by using the Kernel option XUINQUIRE (Inquire). This option is found on the menu XUMAINT (Menu management), which is a sub-menu of the EVE (Systems Manager Menu) option.

A diagram of the structure of the Consults menu and its options can be produced by using the Kernel option XUUSERACC (Diagram Menus). Choosing XUUSERACC permits you to further select XUUSERACC1 or XUUSERACC2 menu diagrams with entry/exit actions or abbreviated menu diagrams. This option is found on the menu XUMAINT (Menu management), which is a sub-menu of the EVE (Systems Manager Menu) option.

## XINDEX

XINDEX is a routine that produces a report called the VA Cross-Referencer. This report is a technical and cross-reference listing of one routine or a group of routines. XINDEX provides a summary of errors and warnings for routines that do not comply with VA programming standards and conventions, a list of local and global variables and what routines they are referenced in, and a listing of internal and external routine calls.

XINDEX is invoked from programmer mode: D ^XINDEX.

When selecting routines, select GMRC\*.

## Glossary

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<b>Action</b>	An action in Consults can be selected throughout processing to 1) control screen movement, or 2) process existing orders.
<b>Consult</b>	Referral of a patient by the primary care physician to another hospital service/specialty, to obtain a medical opinion based on patient evaluation and completion of any procedures, modalities, or treatments the consulting specialist deems necessary to render a medical opinion. For instance, if a primary care physician orders a patient evaluation from Cardiology Service, and the cardiology specialist orders an Electrocardiogram (EKG) to complete the evaluation and provide an opinion concerning the patient's condition, this type of order is considered a "Consult."
<b>Discontinued Orders</b>	Orders that are discontinued. When an order is discontinued, it must be completely re-entered to be resubmitted. However, if an order is <i>canceled</i> , it can be edited to correct some deficiency and resubmitted.
<b>Order</b>	A request for a consult (service/sub-specialty evaluation) or procedure (Electrocardiogram) to be completed for a patient.
<b>Order Cancellation</b>	The cancellation of a consult or procedure request which allows the requesting provider to edit a portion of the original request and re-submit the request to the consulting service.
<b>Order Discontinuation</b>	A request to stop (discontinue) performance of a consult/procedure request.

<b>Procedure Request</b>	Any procedure (EKG, Stress Test, etc.) which may be ordered from another service/specialty without requiring formal consultation first. Procedures are defined in the Protocol file (#101) , using the “Set up Consults Protocol” option.
<b>Result</b>	A consequence of an order. Refers to evaluation or status results. In regards to Consult/Request Tracking, results refer to a TIU document or Medicine procedure result attached to the consult or procedure request.
<b>Requestor</b>	This is the health care provider (e. g., the physician/clinician) who requests the order to be done.
<b>Screen Context</b>	This term refers to the particular selection of orders displayed on the screen (e. g., Medicine consults for the patient Ralph Jones).
<b>Service</b>	A clinical or administrative specialty (or department) within a Medical Center.
<b>Status</b>	A result that indicates the processing state of an order; for example, a Cardiology Consult order may be “discontinued (dc)” or “completed (c)”.
<b>Status Symbols</b>	Codes used in order entry and Consults displays to designate the status of the order.



# Appendix A: Install, Planning, and Implementation Checklist

---

This checklist can help you determine if you have completed the steps needed to implement the Consults package. IRMS/ADPAC personnel should carefully read the *Consult/Request Tracking Technical Manual* for the details related to IRMS/ADPAC implementation.



**NOTE:** Important changes since Consults/Request Tacking Version 2.5 are emphasized with a note.

## INSTALL NOTES:

- ☐ The Consult/Request Tracking V. 3.0 package installs automatically when CPRS V. 1.0 installed.

## PLANNING NOTES:

Participants: IRMS/ADPAC and Service personnel.



**NOTE:** Effective with Consults/Request Tracking V. 3.0:

- 1) A service is only selectable for update/tracking if it is defined as part of the ALL SERVICES hierarchy.
- 2) Disabled services can be left in the ALL SERVICES hierarchy so their order results can be returned, but are not selectable in the ordering process.
- 3) Tracking services must be in the ALL SERVICES hierarchy in order to be receive forwarded consults. The tracking service can only be selectable in the order forwarding process if the user is an update user for the tracking service or its parent service.

## Plan the Consult Service Hierarchy

- ☐ 1a. Identify services to receive consults.
- ☐ 1b. Determine if the service should be selectable in the ordering process from CPRS.

For some consults, the order may need to be sent to a Service control point for Forwarding by the control point to a service which has been identified as a “Tracking Only” service. (Tracking Only services are not selectable during the initial CPRS order process.) Where a service control point is preferred, the tracking services should be sub-specialties under the control point service within the ALL SERVICES hierarchy.

- ☐ 1c. Determine if there should be a service that would be used as a “Grouper Only” (e.g., Inpatient Services, Outpatient Services, and Outside Services might be good Services to define as groupers).

When a Grouper Only service is selected in the CPRS order process, the service hierarchy defined under the grouper service will be displayed to select from. The Grouper Only cannot be selected to receive an order. The ALL SERVICES service is a Grouper Only provided to build the Consult Service hierarchy upon.

## **For each Service:**

### **Identify the Service**

- ☐ 2a. Select a unique name to identify the service while ordering.
- ☐ 2b. Optionally, select an abbreviated print name to be used when displaying notifications. This should be a short name that is easily recognized by users as belonging to the service.
- ☐ 2c. Optionally, select one or more synonyms that can be used when entering the service name into the computer.
- ☐ 3. Identify the service printer which will be used to automatically print Consult Form SF 513 when a consult order is received from CPRS.



**NOTE:** Effective with Consult/Request Tracking V. 3.0, All Consult Form SF 513 prints are done from consult routines. OE/RR print formats are no longer used for consult prints.

### **Plan Actions to take for a Discontinued Consult**

- ☐ 4a. Decide if the service should be notified when a consult is discontinued.
- ☐ 4b. Decide if the SF 513 should be reprinted to the receiving service when a consult is discontinued.

### **Plan Prerequisites and Boilerplate**

- ☐ 5a. Decide if consults going to this service should be required to have a provisional diagnosis. The provisional diagnosis can be required, set as optional, or suppressed.
- ☐ 5b. Decide if provisional diagnosis going to this service should be taken from the Clinical Lexicon, or if free text is allowed.

- ☐ 6. Decide if consults going to this service should have a prerequisite. A prerequisite is a text message that reminds the referring physician what needs to be done before a consult can be sent to this service. The prerequisite message gives the referring physician a chance to back out of the consult dialog.
- ☐ 7a. Decide if consults going to this service should provide a default reason for request when an order is placed. This is a piece of boilerplate text, including TIU objects, that is consistent for each consult received.
- ☐ 7b. Decide if editing of the default reason for request should be restricted. Editing can be unrestricted, restricted, or allowed only before release to the service.

### **Plan Notification Recipients**

- ☐ 8a. Identify individuals at the receiving service who should be notified when a consult is being sent to the receiving service.
- ☐ 8b. Identify service teams of clinicians or service users which should receive notifications. Team definitions may be used in addition to or in lieu of naming individuals to receive notifications.
- ☐ 8c. Identify hospital locations that are assumed to be part of this service. Any consult activity on patients in that location triggers a notification. Specify one individual to notify and/or a team to notify.
- ☐ 9. Decide if parent services of this service should be notified of activities occurring on consults for this service.
- ☐ 10. Decide if notifications should be deleted on an individual basis, or if all notifications should be deleted when one individual reviews it. The default is Individual Recipient, so if All Recipients is desired, use the Set Deletion Parameters for Notifications option of the Notification Mgmt Menu to change this value for each of the four consult notifications. These are:
  - #23 CONSULT/REQUEST RESOLUTION
  - #27 NEW SERVICE CONSULT/REQUEST
  - #30 CONSULT/REQUEST CANCEL/HOLD

### **Plan Service Users**

- ☐ 10. Decide if you are going to allow unrestricted access to this service. If so, you may skip to step 13.
- ☐ 11a. Identify individuals at the receiving service who will NOT receive notifications about new consults, but should be able to perform update capabilities for this service.

- ☐ 11b. Identify teams at the receiving service who will NOT receive notifications about new consults, but should be able to perform update capabilities for this service.
- ☐ 11b. Identify user classes who will NOT receive notifications about new consults, but should be able to perform update capabilities for this service.
- ☐ 11e. Identify administrative update users. Such a user can perform administrative completions on consults at this service. These users can, optionally, be included as notifications recipients for this service.
- ☐ 11f. Identify administrative update teams for this service. The members of these teams can, optionally, be included as notifications recipients for this service.
- ☐ 12. Decide if update users of the parent services should be allowed to update consults for this service.
- ☐ 13. Identify a special updates individual (someone who can perform group updates) for this service. This individual should already be a service user.

#### Plan Specific Procedures or Requests for Service(s)

- ☐ 14. Identify sub-services of this service.
- ☐ 15. *Optional*: Identify direct request or procedure orders which specific consult services may receive, which do not require a Consult. (e.g., EKG: Portable)

## IMPLEMENTATION AND MAINTENANCE (Abbreviated guidelines)

Participants: IRMS/ADPAC

- ☐ 1. You may set up a team for each consult service. The team members being the identified clinical users. Use the Team Mgmt Menu option, ORLP TEAM MENU.
- ☐ 2. Turn on the NEW SERVICE CONSULT/REQUEST notification for each of the individuals who were identified to receive notifications. Use the Enable/Disable Notifications option of the NOTIFICATION MGMT MENU, ORB NOT MGR MENU.



**NOTE:** Unless Consult notifications are set to mandatory, individual users may use the Enable/Disable My Notifications option of the Notifications Management Menu to individually disable the notifications they do not want to receive.

- ☐ 3. Turn on the CONSULT/REQUEST RESOLUTION notification for each ordering provider identified to receive this notification, or train them to do it themselves. Use the Enable/Disable Notifications option of the NOTIFICATION MGMT MENU, ORB NOT MGR MENU.
- ☐ 4. Turn on the CONSULT/REQUEST CANCEL/HOLD notification for each ordering provider identified to receive this notification, or train them to do it themselves. Use the Enable/Disable Notifications option of the NOTIFICATION MGMT MENU, ORB NOT MGR MENU.
- ☐ 5. Define the Service hierarchy in the Request Services File (#123.5) with the associated users and service printer. Use the “Set up Consult Services” option, GMRC SETUP REQUEST SERVICES.



**NOTE:** You must NOT use VA FileMan to modify services in the hierarchy. The Consult/Request Tracking interface to CPRS depends on the services being defined using the GMRC SETUP REQUEST SERVICES option.

- ☐ 6. Assign the Setup Service Users GMRC SETUP SERVICE USERS option to the users permitted to manage service users.
- ☐ 7. Assign the following two options to Service update users’ primary or secondary menu option: Consult Tracking [GMRC SERVICE TRACKING] and Service Consults Pending Resolution [GMRC RPT PENDING CONSULTS].
- ☐ 8. *(Optional)* If direct request items were identified related to a RECEIVING SERVICE, create Protocol entries in the PROTOCOL File for each Direct Request

Item which should appear on an Add New Orders Screen. Use the “Set up Consult Protocols [GMRC SETUP PROTOCOLS]" option to define these direct request items as “Procedure Requests.” These Protocol entries will be created with a name prefix of “GMRCR.”

### TIU Setup

☐ 9. Plan your hospital’s TIU hierarchy. See the *Text Integration Utility (TIU) Implementation Guide* for details on this step.

☐ 10. If you have not already done so, install TIU\*1\*4.

☐ 11. Run the TIU DEFINE CONSULTS option.



**NOTE:** If you do not run the TIU DEFINE CONSULTS option, no status update takes place when the TIU note is entered.

☐ 12. Enter the rest of your planned TIU document hierarchy using the Manager Document Definition Menu.

☐ 13. Define consult document parameters (as recommended on page 56 of this manual) using the Document Parameter Edit option.



**NOTE:** We particularly recommend entering Yes to ALLOW >1 RECORDS PER VISIT.

## **Appendix B: Consult Tracking Worksheets**

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In this section there are several worksheets that may be removed from the manual and copied. These worksheets assist you in setting up each Service/Specialty and in setting up Service Notification assignments for individuals or teams who will be receiving consult results.

The first and second worksheets may be used for small Services, with very few Specialty services under them, who will be receiving on-line consults and/or procedure requests.

The third and fourth worksheets should be used by large complex Services with multiple Specialty services under them, who will be receiving on-line consults and/or procedure requests.

# Consult Services Worksheet

## Service Set up

Service/Specialty Name: \_\_\_\_\_

Abbreviated Print Name: \_\_\_\_\_

*This optional abbreviation are used when building notifications.*

Synonyms: \_\_\_\_\_

*These optional abbreviations are used when selecting the service.*

Service Usage: ☐ Blank ☐ Grouper ☐ Tracking

Service Printer: \_\_\_\_\_

*A service may define a device to which its Consult forms automatically print.*

Notify Service on DC: ☐ Yes ☐ No

*Update users of a service may be notified when a consult is discontinued.*

Reprint 513 on DC: ☐ Yes ☐ No

*The SF 513 may be reprinted to the consulting service when a consult is discontinued.*

Provisional DX Prompt: ☐ Required ☐ Optional ☐ Suppressed

*Set whether a diagnosis is required, optional, or suppressed when ordering.*

Provisional DX Input: ☐ Lexicon ☐ Free Text

*If the diagnosis is not suppressed, specifies whether the diagnosis must be from the Clinical Lexicon or not.*

Prerequisite:

*Prerequisite information may be displayed to the consult ordering physician before proceeding with the ordering of a consult to this service. This may include TIU fields (enclosed in \).*

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Default Reason for Request:

*Boilerplate may be supplied for the reason for request. This may include TIU fields (enclosed in \).*

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Restrict Default Reason Edit: ☐ Unrestricted ☐ No Editing ☐ Ask

*Determines if the boilerplate can be edited by the ordering physician.*



# Consult Services Worksheet

## Notification Users

Service Individual to Notify: \_\_\_\_\_

*Individuals who need to receive Notifications for this service should be listed here.*

Service Team to Notify:

*All full update users to receive notifications need to be defined on one of these teams.*

\_\_\_\_\_

Notification by Pt Location:

*Locations in which all patients are considered belonging to this service should be listed here. For each location, you can specify one individual and one team to be notified.*

Location \_\_\_\_\_ Individual \_\_\_\_\_  
Team \_\_\_\_\_

Location \_\_\_\_\_ Individual \_\_\_\_\_  
Team \_\_\_\_\_

Process Parents for Notifications: ☐ Yes ☐ No

*Determines whether the notification recipients defined for the parent service should be notified of actions on consults directed to this service.*

## Update Users

Update Users without Notifications:

*Service users who should be able to perform update capabilities, but DO NOT receive notifications should be defined here. The same algorithm is used to determine the recipients for all types of consult notifications.*

\_\_\_\_\_  
\_\_\_\_\_

Update Teams without Notifications:

\_\_\_\_\_

Update User Class without Notifications:

\_\_\_\_\_

# Consult Services Worksheet

## Administrative Update Users:

*Users who may close consults without attaching a TIU note are defined here.*

\_\_\_\_\_ Notification Recipient? ☐ Yes ☐ No

\_\_\_\_\_ Notification Recipient? ☐ Yes ☐ No

## Administrative Update Teams:

*Teams whose members may close consults without attaching a TIU note are defined here.*

\_\_\_\_\_ Notification Recipient? ☐ Yes ☐ No

\_\_\_\_\_ Notification Recipient? ☐ Yes ☐ No

## Process Parents for Updates:

*Determines whether the update users defined for the parent service should have the same update privileges on consults directed to this service.*

☐ Yes ☐ No

## Special Update Individual:

*A user who is allowed to perform batch updating of status on consults.*

\_\_\_\_\_

## Unrestricted Access:

*If marked yes, any user may have update access to this service.*

Yes ☐ No

## Miscellaneous

## Sup-Service Specialty:

*Services that are below this one in the Consults Service Hierarchy.*

\_\_\_\_\_  
\_\_\_\_\_

## Procedure Type:

*A clinical procedure associated with this service.*

\_\_\_\_\_

## Appendix C: Request Services Distributed with Consults

---



**Note:** The distributed services are those services shown below with an asterisk(\*). The hierarchy shown below via the sub-service specialty column is not distributed. Use the Set up Consults Services option to build the hierarchy for your service. Remember, the top of the hierarchy must be ALL SERVICES.

### REQUEST SERVICES LIST

NAME SUB-SERVICE SPECIALTY	PROTOCOL ACTION MENU BY OPTION
*ALL SERVICES	
MEDICINE	
PHARMACY SERVICE	
*CARDIOLOGY	GMRCACTM MEDICINE PKG MENU
*GASTROENTEROLOGY	GMRCACTM MEDICINE PKG MENU
*HEMATOLOGY	GMRCACTM MEDICINE PKG MENU
*MEDICINE	
CARDIOLOGY	
GASTROENTEROLOGY	
HEMATOLOGY	
PULMONARY	
RHEUMATOLOGY	
*PHARMACY SERVICE	GMRCACTM PHARMACY PKG MENU
*PULMONARY	GMRCACTM MEDICINE PKG MENU
*RHEUMATOLOGY	GMRCACTM MEDICINE PKG MENU

The indented services represent sub-service/specialties making up the hierarchy.



**Caution:** New services must be added to ALL SERVICES if not a sub-service specialty.







## Appendix D: Package Security

---

### Service Update and Tracking Security

You can use the Consult Service User Management option, in conjunction with availability to various menus and options, to control access to Consults functionality. The menus that can be provided are:

- Consult Service Tracking
- Pharmacy Consult User

The Consult Service Tracking menu provides access to basic consult tracking functions and reports, but can also provide complete update capabilities if you have been granted update privileges by your ADPAC.

Individual options in the Consults package that may be useful to users, and what access they provide, are detailed in the following table:

Option	Services
Consult Service Tracking	Tracking and/or update functionality depending upon your individual privileges.
Pharmacy TPN Consults	Tracking, and update functionality.
Completion Time Statistics	Reporting.
Service Consults Pending Resolution	Reporting.

With the GMRC Service User Management option you can set users up to be update users for one or more services at your hospital. In addition, you can grant the ability to receive consult notifications according to criteria outlined in the following table:

Category	Notifications Received
UPDATE USERS W/O NOTIFICATIONS	Unless otherwise set up, will not receive notifications.
SERVICE INDIVIDUAL TO NOTIFY	Receive consult notifications for your service.
SERVICE TEAM TO NOTIFY	Receive consult notifications for your service. <i>These teams send notifications regardless of the patients contained on them.</i>
NOTIFICATION BY PT LOCATION INDIVIDUAL TO NOTIFY	Receive all consult notifications for your service for patients in a specified ward.
NOTIFICATION BY PT LOCATION TEAM TO NOTIFY	Receive consult notifications for patients in a specified ward.

These categories are not mutually exclusive, meaning a user may receive notifications based on being present on one or more of the lists detailed in the preceding table.

The following table lists privileges a user may want and who that privilege is granted to:

Privilege	Granted
Originate a consult	Anyone with access to CPRS
Sign a consult	Anyone who can sign an order
Change a consult status	Anyone with update privileges
View or print a consult	Anyone with the Consult Service Tracking option or access to CPRS.

In summary, update user capabilities vary depending on

- 1) The option(s) that you are assigned.
- 2) Privileges granted in the Consults Service User Management option.

## Menu/Option Access

The following menus/options are available with the Consults package for distribution to users.



Option Name	File
GMRC MGR	19
GMRC GENERAL SERVICE USER	19
GMRC PHARMACY USER	19
GMRC SERVICE TRACKING	19
GMRC TPN CONSULTS	19
GMRC RPT PENDING CONSULTS	19
GMRC REVIEW SCREEN	101

### **GMRC MGR menu**

This option should be given to IRMS/ADPAC personnel. It is composed of all options distributed with the Consults package.

### **GMRC GENERAL SERVICE USER menu**

This menu provides access to the most commonly used Consults options that a general user, other than Medicine, would be interested in. This option should be added to their primary or secondary menu options.

## GMRC PHARMACY USER menu

This menu provides access to the most commonly used Consults options that a user of the Pharmacy TPN option would be interested in. This option should be added to their primary or secondary menu options.

### GMRC SERVICE TRACKING option

The Consult Service Tracking (GMRC SERVICE TRACKING) option may be given to “review only” AND service “update” users. This option should be added to their primary or secondary menu options.

You may want to add the GMRC SERVICE TRACKING option to the OR MAIN MENU options in the Option file (#19) as well, since users of these OR options are likely interested in reviewing consult/request activities services may have taken.

### GMRC PHARMACY TPN CONSULTS option

Pharmacy personnel who need to be able to update File 123, REQUEST/CONSULTATION file, with service activity tracking updates should have the GMRC PHARMACY TPN CONSULTS option added to their primary or secondary menu options.

## Security Keys

### GMRC Keys

One security key, GMRC101, is distributed with this package. It is not a key to be distributed to Consults users. This key is used by the “Set up Consults Protocols” option to ensure that distributed GMRCR and GMRCT PROTOCOL NAMES (.01 field) are not altered. Protocols distributed with an “ACCESS” of GMRC101 may not have their .01 name changed, due to package dependencies upon that name.

### File Security

The following is a list of recommended VA FileMan access codes associated with each file contained in the Consults package:

File Number	File Name	DD Access	RD Access	WR Access	DEL Access	LAYGO Access
(#123)	Request/Consultation					
(#123.1)	Request Action Types					
(#123.5)	Request Services				@	
(#123.9)	Consults Parameters					

## **Service Update Tracking Security**

The Consults Package is distributed for *all* Services at a facility to track consult/request activity. Security at the Service level is set up by IRMS/ADPAC personnel in the Request Services file (#123.5). Specific fields which provide security restrictions include:

### **PROTOCOL ACTION MENU BY USERS**

The PROTOCOL ACTION MENU BY USERS field works in conjunction with the user fields in the Request Services file (#123.5).

## **GMRCACTM PHARMACY PKG MENU**

This is the PROTOCOL ACTION MENU exported for use by Pharmacy Service personnel to process Pharmacy TPN Consults.

## Routine Descriptions

GMRC101	Create Protocol entries for OE/RR ADD orders screens
GMRC101C	Create Protocol entries for OE/RR ADD orders screens (Continued)
GMRC101H	Set up HL-7 message to update OERR orderable items file with new consult type
GMRC513U	Obsolete utility deleted with GMRC*3*4
GMRC7L	List Template Exporter
GMRCA1	Actions taken from Review Screens
GMRCA2	Select prompt for processing actions
GMRCAAC	Administrative Complete action consult logic
GMRCACMT	Comment Action and alerting
GMRCACTM	Set GMRCACTM with action menu based on Service
GMRCADC	Discontinue Action taken from List Manager
GMRCAFRD	Forward Req (FR) Action from Review Screen
GMRCALOR	Process a consult from an alert notification
GMRCALRT	List Manager alert action interface
GMRCAR	Associate Results (AR) Action taken from Review Screen
GMRCART	Result display logic
GMRCASF	Significant Findings Action
GMRCAST	Select OE/RR Status (ST) Action
GMRCASV	Build ^TMP("GMRCS" of Svc(s)/Specialties
GMRCAU	Action Utilities
GMRCCLR	Kill-off all variables used for consults tracking.
GMRCCPRS	Routine To Give Actions For Consults From The OE/RR Menu's
GMRCDDX	AC cross-reference logic for 123.5, field .01

GMRCDPCK Check for a duplicate Consult/Request that has a status of active, pending or scheduled

GMRCDRFR Default reason for request utils

GMRCEDIT Edit cancelled consult-main driver

GMRCEDT1 Edit a consult and re-send as new

GMRCEDT2 Resubmit a cancelled consult

GMRCEDT3 For a Cancelled Consult - File edited data for tracking consult

GMRCEDT4 Utilities for editing fields

GMRCEDT5 Edit a consult and re-send as new

GMRCEDT8 Edit a consult and re-send as new

GMRCFX23 Consult post-init file maintenance

GMRCGUIA File Consult actions from GUI

GMRCGUIB GUI actions for consults

GMRCGUIC GUI actions for editing consults

GMRCGUIU Kill off variables from GUI routines

GMRCHK GMRC CHECK FOR PROGRAMMER ACCESS

GMRCHL7 HL-7 formatting routine for consult information to be passed to OER

GMRCHL72 HL-7 formats OBX and NTE segments

GMRCHL7A Receive HL-7 Message form OERR and break it into its components and store it in File 123

GMRCHL7B Process order parameters from ^GMRCHL7A and place data into ^GMR(123 global

GMRCHL7U Utilities associated with HL7 messages

GMRCHLP List Manager help logic

GMRCLMWB GMRC List Manager Work Bench/Protocol calls

GMRCMCP List Manager Format Routine To Collect Medicine Package Consults and format them for display by List Manager.

GMRCMED Medicine interface routines

GMRCMED1 Extract medicine results for consult tracking

GMRCMENU Select List Manager menu for user characteristics

GMRCMER Print Medicine Results in List Manager Format

GMRCMP List Manager routine: Medical Service and sub-specialty consults

GMRCMSS Setup Request Services

GMRCMU Add protocols to GMRC protocol menus

GMRCNOTF Notification recipient utilities

GMRCP Message audit and status process

GMRCP5 Print Consult form 513 (main entry)

GMRCP513 Print Consult form 513

GMRCP5A Print Consult form 513 (Gather Data - TIU Results)

GMRCP5B Print Consult form 513 (Gather Data - Footers, Provisional Diagnosis and Reason For Request)

GMRCP5C Print Consult form 513 (Assemble Segments And Print)

GMRCP5D Print Consult form 513 (Gather Data - Addendums, Headers, Service reports and Comments)

GMRCPC List Manager Routine: Collect and display consults by service and status

GMRCPC1 List Manager Routine: Collect and display consults by service and status

GMRCPH Process XQORM HELPS ;

GMRCPLU Utilities for place of consult

GMRCPOR Get DOC,LOC,TS in interactive defaults

GMRCPOS Consult post-init file maintenance ;10/28/98 14:31

GMRCPOS1 Post init to move Services from file 123.5 to the orderable items file, 101.43, and orderables in file 101 to file 101.43

GMRCPOS2 Consult post-init file maintenance

GMRCPOST	Post init driver routine
GMRCPP	Print GMRC consult/request tracking protocols - List Manager routine
GMRCPR	GMRC List Manager Routine - Get information for abbreviated print of GMRC protocols and format for List Manager
GMRCPR0	Data Entry Prompt actions
GMRCPREF	Setup package/procedure protocols
GMRCPROT	Consult post-init file maintenance
GMRCPRP	Set protocol information into ^TMP global for print and display by List Manager
GMRCPRPS	List Manager GMRC Routine -- List GMRC (Consults/Request) Protocols in abbreviated form.
GMRCPS	Select Service/specialty to send Consult to
GMRCPSEL	Select Range Of Items From List
GMRCPURG	Orders from the Order File 100
GMRCPX	Select a new pharmacy patient for list manager consult tracking display
GMRCPZ	GMRC List Manager Routine -- Main menu actions for Pharmacy consults request tracking
GMRCQC	GMRC List Manager routine to print Consults pending resolution for QC purposes
GMRCQCST	Gather all consults for QC that do not have status of discontinued, complete, or expired
GMRCR	Driver for reviewing patient consult/requests - Used by Medicine Package to link Consults to Medicine results
GMRCR0	Add original consult via backdoor service
GMRCR06	Complete a consult/request
GMRCRA	Build ^TMP("GMRCR",\$J, array of consults
GMRCREXT	Clean-up all variables and ^TMP globals upon exit
GMRCRFX	Consult post-init save GMRCR protocol file links



GMRCRPOS	Consult post-init save GMRCR protocol file links
GMRCSS	Review consults by Patient and Service
GMRCSSL	Active Consults by Service
GMRCSLDT	Get a consults detailed tracking history formatted for List Manager
GMRCSLM	List Mgr routine for consult tracking list
GMRCSLM1	Gather data and format ^TMP global for consult tracking Silent call for use by List Manager and GUI
GMRCSLM2	List Manager routine - Detailed consult display and printing
GMRCSLM3	Extract medicine results for consult tracking
GMRCSLM4	List Manager routine - Activity Log Detailed Display
GMRCSLMA	List Manager protocol entry, exit actions
GMRCSLMU	Utilities for displaying consults in List manager
GMRCSLMV	Set Video attributes for list manager screens
GMRCSPD	Change Date Range in CSLT Tracking Module
GMRCSRVS	Add/Edit services in File 123.5.
GMRCSSP	List Manager Format Routine To Collect Pharmacy TPN Consults that are Not Completed Or Have Been Discontinued
GMRCST	Statistics on how long to complete consult/requests for a service
GMRCST0	Statistics on how long to complete consult/requests for a service
GMRCST00	Statistics on how long to complete consult/requests for a service
GMRCSTAT	List Manager Ancillary routine - Restrict display of consults to a given status or statuses on List Manager Screen
GMRCSTL1	List Manager Format Routine - Get Active Consults by service - pending, active, scheduled, incomplete, etc.
GMRCSTL2	List Manager Format Routine - Get Active Consults by service - pending, active, scheduled, incomplete, etc.

GMRCSTLM List Manager Format Routine - Get Active Consults by service - pending, active, scheduled, incomplete, etc.

GMRCSTS Group update status of consult and order

GMRCSTS1 Group update of consults cont'd

GMRCSTS2 Change status based on result activity

GMRCSTSI Special processing to change status of selected consult and order

GMRCSTSU Change status based on current order status

GMRCSTSZ Loop "AE" and get entries, dump in ^TMP

GMRCSTU Statistic Utilities for Consult/Request Package

GMRCSTU1 Statistic Utilities for Consult/Request Package

GMRCSUBS Routine to check if a Service has more than one parent service

GMRCSVCU Utility to put services from file 123.5 into file 101.43 when service exists in 123.5 but not 101.43

GMRCT Get DUZ's of users for notification to service

GMRCTIU TIU utilities for exchanging info with Consults

GMRCTIU1 More CT/TIU interface modules

GMRCTIU2 Enter TIU Browse with DFN and TIUDA

GMRCTIU3 Extract medicine results for consults tracking

GMRCTIUA Add the TIU note to the results multiple

GMRCTIUE Complete/Update TIU notes

GMRCTIUL Get list of existing results for consults

GMRCTIUP TIU utilities for exchanging info with Consults

GMRCTU Consults - Terminated users/remove pointers.

GMRCTU1 Get DD Info

GMRCU Consult/Request Utilities

GMRCUTIL Utilities for formatting word processing fields and setting into  
^TMP("GMRCR" globals for use by List Manager routines

GMRCUTL1 General Utilities

GMRCXQ Routine to allow follow-up on legacy alerts

GMRCYP16 Pre/Post install for GMRC\*3\*16

GMRCYP4 Consult patch 4 pre-init

GMRCYP5 Consult patch 5 pre-init

GMRCYP7 Consult clean-up unreleased at test sites

GMRCYP8 POST INSTALL FOR GMRC\*3\*8

GMRCYP9 Remove Terminated Users

GMRCYP9B Remove Terminated Users (get DD info)

GMRCZAU Action Utilities

GMRCZSLM List Manager Main routine for consult tracking list

GMRCZSLZ Active Consults by Service

GMRCZSTZ

GMRCZT Get DUZ's of users for notification to service

## Routine Mapping

For systems that can use routine mapping, this is a list of routines in the Consults package that should be mapped.

Routine Prefix	Routine Usage
GMRCA*	Action routines
GMRCP*	CPRS interface routines
GMRCR*	Consults review/tracking routines
GMRCS	Service entry point to review/tracking
GMRCU*	Utility routines
GMRCXQ	View Alerts followup

The asterisk (\*) is a wild card specification. Any routines beginning with the characters before the asterisks are included in the set.

The other routines do not need to be mapped due to their smaller frequency of usage.

---

## Appendix C: Algorithms

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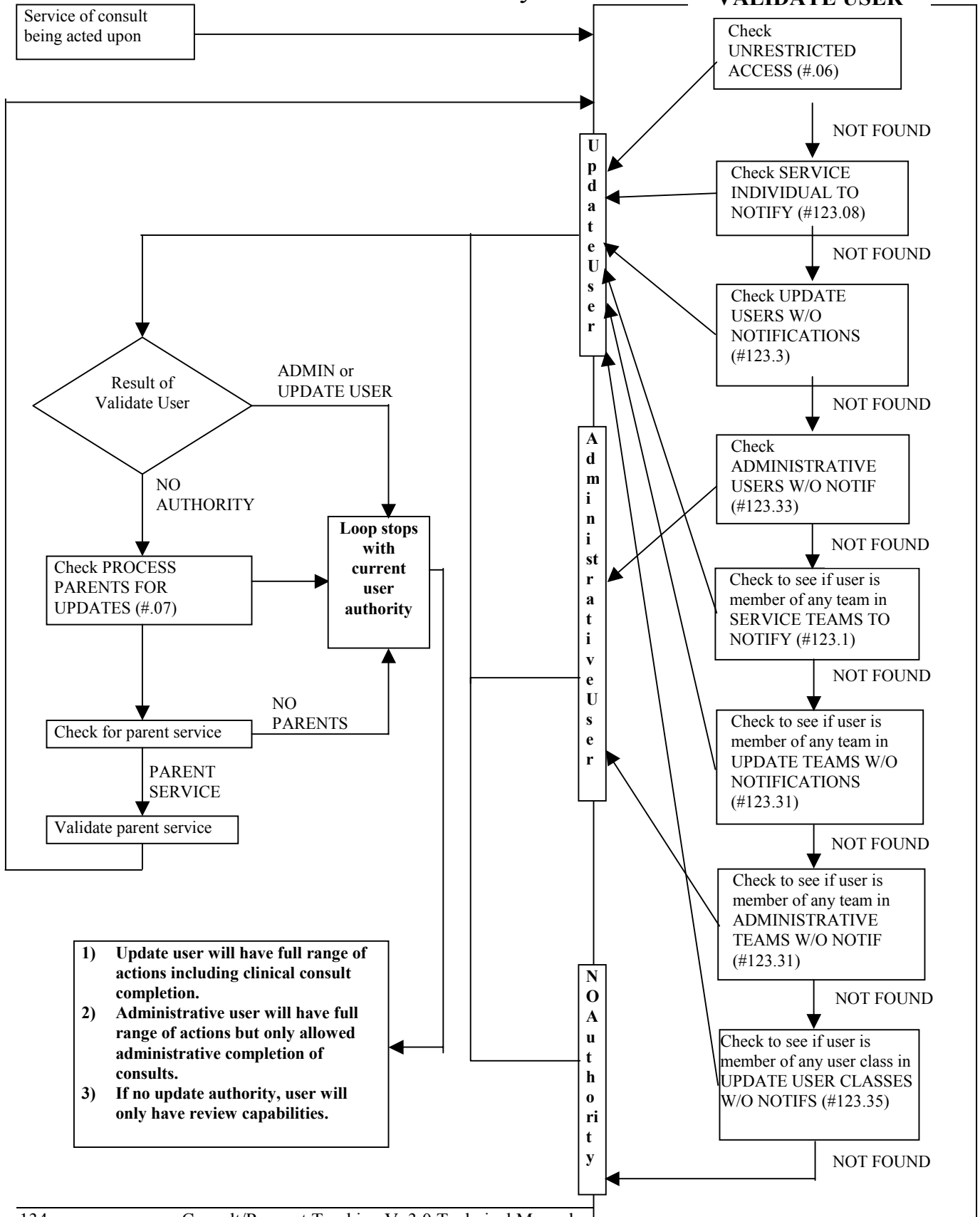
### User Authority

The flow chart on the next page represents processing accomplished to determine the user authority for any given user. This authority can be check by using the Determine Users' Update Authority (UA) action on the Consult Management Menu.

#### Example:

Select Consult Management Option: ua   Determine users' update authority		
This option will allow you to check a users update authority for any given service in the consults hierarchy. If the PROCESS PARENTS FOR UPDATES field is set to YES, all ancestors of the selected service will be checked. The type of update authority and the service to which they are assigned will be displayed.		
Select Consult Service: arth   Arthritis		
Choose user to check for update status: snow,CHARLES R.	CRS	PHY
SICIAN		
This user is an update user for: Arthritis via the UPDATE TEAMS W/O NOTIFICATIONS field.		
Select Consult Service: arth   Arthritis		
Choose user to check for update status: welby,MARCUS	MW	CHIEF,
MEDICAL SERVICE		
This user has no update authority		
Select Consult Service:		

## Enhanced User Authority



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